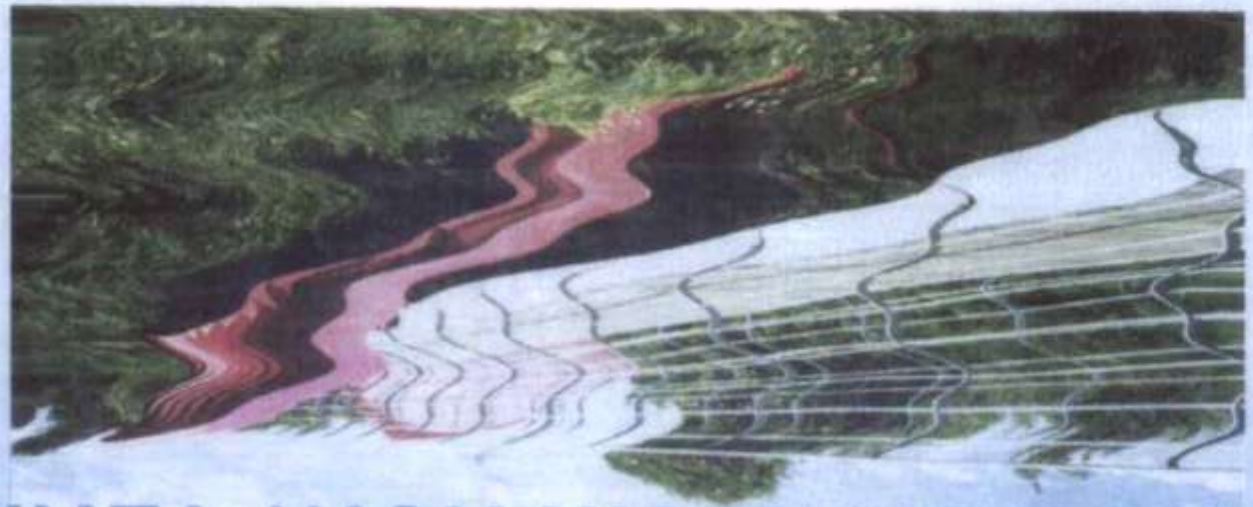
HACKNEY WICK RIVER ACTION PLAN

British Waterways

HACKNEY WICK PARTNERSHIP



HACKNEY WICK RIVER ACTION PLAN

HACKNEY WICK

RIVER ACTION PLAN

Working Draft Report

November 2000

Prepared for the Hackney Wick Regeneration Partnership by

British Waterways

Waterway Environment Services

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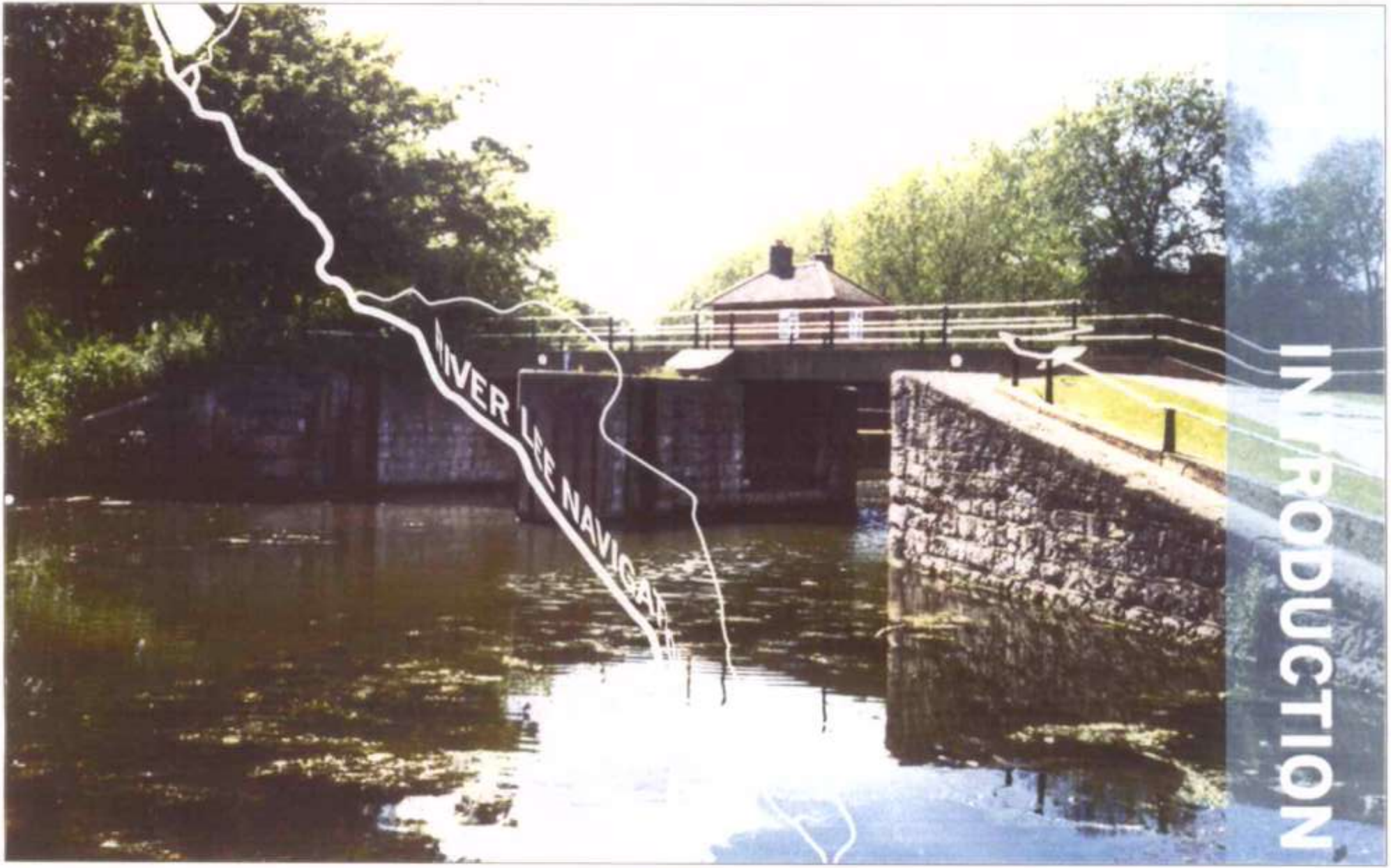

IVER LEE NAVIGATION
INTRODUCTION

1 INTRODUCTION

BACKGROUND

In 1996 the Hackney Wick Regeneration Partnership was formed to focus regeneration effort centred around Millfields, Clapton Park, Kingsmead and Trowbridge Estates, Hackney Marshes and Hackney Stadium. This was a joint initiative lead by Hackney Council, including the London Boroughs of Newham, Tower Hamlets and Waltham Forest, Groundwork Hackney, the Metropolitan Police, the Lee Valley Regional Park Authority and many other organisations and local community groups. Hackney Wick itself lies adjacent to Stratford and the Lower Lee Valley which over the next decade will form a major strategic growth centre for London through the provision of an International Passenger Station at Stratford and the development of related rail lands, the completion of the Jubilee Line Extension and the completion of the Hackney-M11 Link Road.

The aim of the Hackney Wick Regeneration Partnership is to co-ordinate effort and provide the strategic framework for the seven year regeneration programme in Hackney Wick under the Government's Single Regeneration Budget (SRB) initiative. The Partnership's vision is to transform the economic, social and physical fabric of the Wick area making it an integral part of the regeneration of East London centred around Stratford ensuring a dynamic and sustainable future. It will seize the opportunities presented by the major transport investment programmed for the area, particularly the Jubilee Line Extension and the Hackney-M11 Link Road which will become a gateway to Stratford's development. The Partnership will provide a focus for investment in the area. This will ensure that businesses thrive and that local communities have access to new jobs, homes, services and activities in a high quality environment, so that people will feel content and safe in their neighbourhood and take pride in its appearance.

RIVER CORRIDOR STUDY

To guide and effectively target investment along the River Lee Navigation which runs through the heart of the Hackney Wick SRB Area, this River Corridor Study has been prepared by Waterway Environment Services, British Waterways' design and planning consultancy for the Hackney Wick Regeneration Partnership.

In developing the brief, British Waterways recognised that there were significant redevelopment opportunities already being investigated upstream and downstream of the Hackney Wick SRB area. This being the redevelopment of 'Fish Island' opposite Old Ford Locks (Big Breakfast TV Studio) led by the Lee Side Regeneration Company and the potential for Sports Lottery Funding for the sports ground opposite Springfield Marina. In light of this, this study was extended beyond the Hackney Wick SRB area to link up all these initiatives, along this short stretch of the River Lee Navigation.

British Waterways has developed canal/river corridor studies and action plans as a tool to identify and demonstrate how the physical environment of the canal/river can be enhanced for the benefit of its users and act as a catalyst for the regeneration of an area These studies have been successful in attracting partnership funding and support and in encouraging sustainable development focused on the waterway.

DELIVERY PLAN OBJECTIVES

The River Lee Navigation corridor has the potential to act as a focus for a range of regeneration and environmental initiatives which will contribute to several delivery plan objectives for the Hackney Wick Regeneration Partnership, as follows:

- SO2 : Encourage sustainable economic growth;
- SO3 : Protect and improve the environment and infrastructure;
- SO6 : Tackle crime and improve community safety;
- SO7 : Enhance quality of life and contribute to local regeneration.

PROJECT AIMS

The Action Plan (Section 10) identifies opportunities and issues with costed proposals and delivery timescales within the lifetime of the SRB funding and beyond. In particular it considers:

- The river corridor as a catalyst for regeneration;
- Improvements to enhance the local environment – both built and natural;
- Developing the river's recreation potential;
- Reducing fear of crime and improving community safety;
- Improvements for access for all users;
- Contributions to sustainability issues including transport and waste transfer;
- Guidance for new development within the river corridor;
- The potential for the local community – both residential and business – to be closely involved in the future of the river corridor.

A key element in the preparation of this study was a communications exercise involving the range of interests making up the local community. Groundwork Hackney and the Lower Lea Project were closely involved in both the communications exercise and the development of proposals incorporated within this study.

FUNDING/IMPLEMENTATION

The Action Plan (Section 10) provides a framework for proposals/actions to be prioritised and implemented in the short-term within the lifetime of the SRB and in the medium to long-term in future years. The majority of the proposals/actions will affect land owned by British Waterways or the three local authorities, Hackney, Tower Hamlets and Waltham Forest, but a few will involve agreements with private landowners. The Action Plan has been prepared to help the Hackney Wick Regeneration Partnership and other related organisations to target and prioritise their resources as well as develop partnerships and secure match funding to take the projects forward.

2 CONTEXT

2 CONTEXT

LOCATION

Central to this stretch of the River Lee Navigation is Hackney Wick which occupies 290 hectares (about one square mile) of the eastern part of the London Borough of Hackney in northeast London. To the north, the River Lee Navigation forms the borough boundary between Hackney and Waltham Forest and to the south, the River Lee Navigation runs through Tower Hamlets Borough with Newham Borough close to the east (section 2.3).

WATERWAYS

The River Lee Navigation runs through the heart of Hackney Wick on its way from Bishop Stortford and Hertford flowing south to join the River Thames just east of the Blackwall Tunnel. In Tower Hamlets London Borough the River Lee Navigation is linked to a 2000 mile network of inland waterways by the Hertford Union Canal and the Regent's Canal which it joins near to Victoria Park (section 2.2). The Lee Valley is a broad flat valley whose floor is some 2km wide in the Wick and whose sides rise slowly to about 20m in Clapton Park to the west and Leyton to the east. Much of the valley is included within the Lee Valley Regional Park, including Hackney and Walthamstow Marshes.

TRANSPORT LINKS

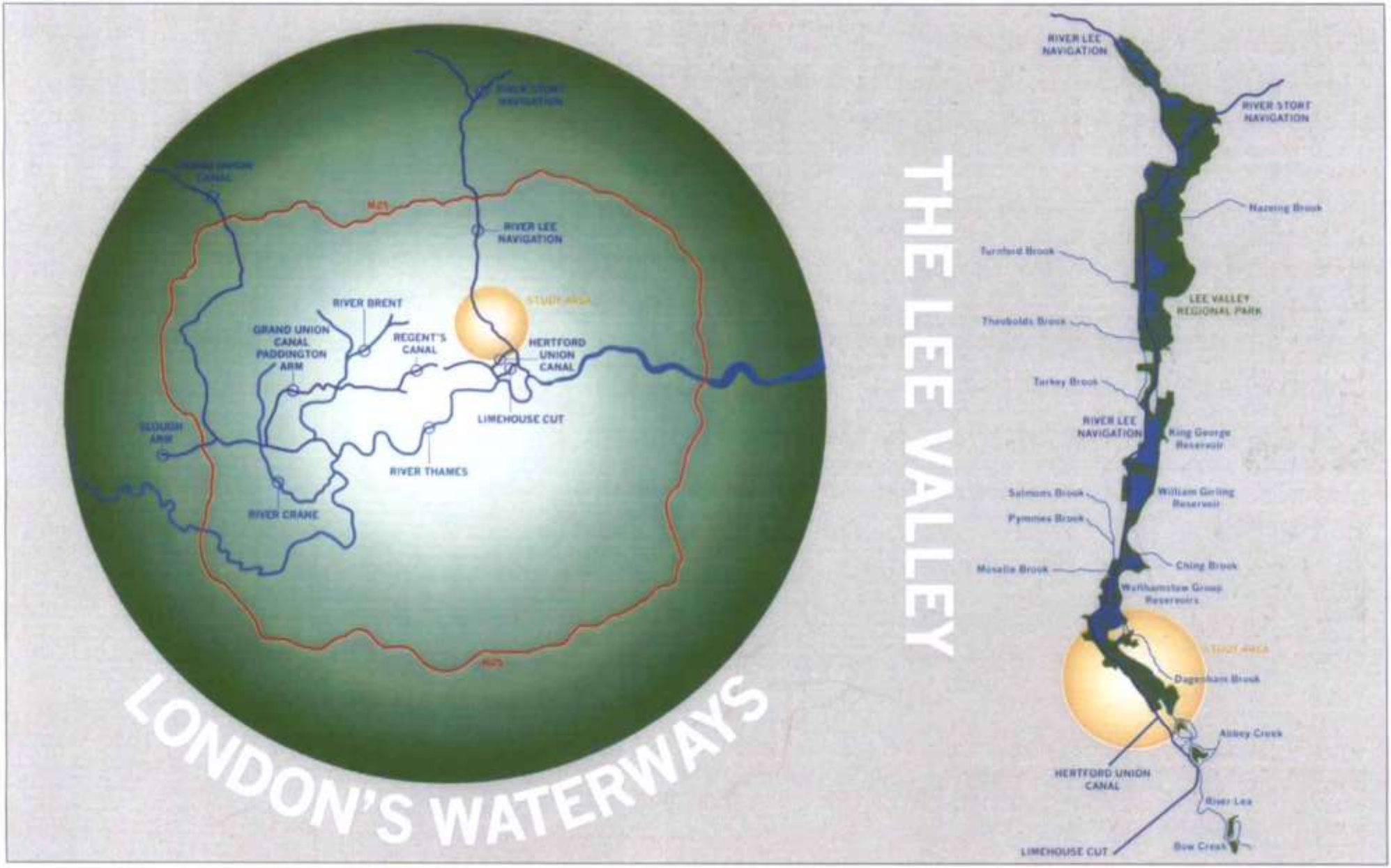
The main transport links through the corridor include the A102(M) which bisects the southern part of the Wick joining up with the M11 Link Road to the east and the A104 which bisects the corridor to the north of the Wick. The area is served by railway stations at Stratford, Hackney Wick, Homerton and Clapton.

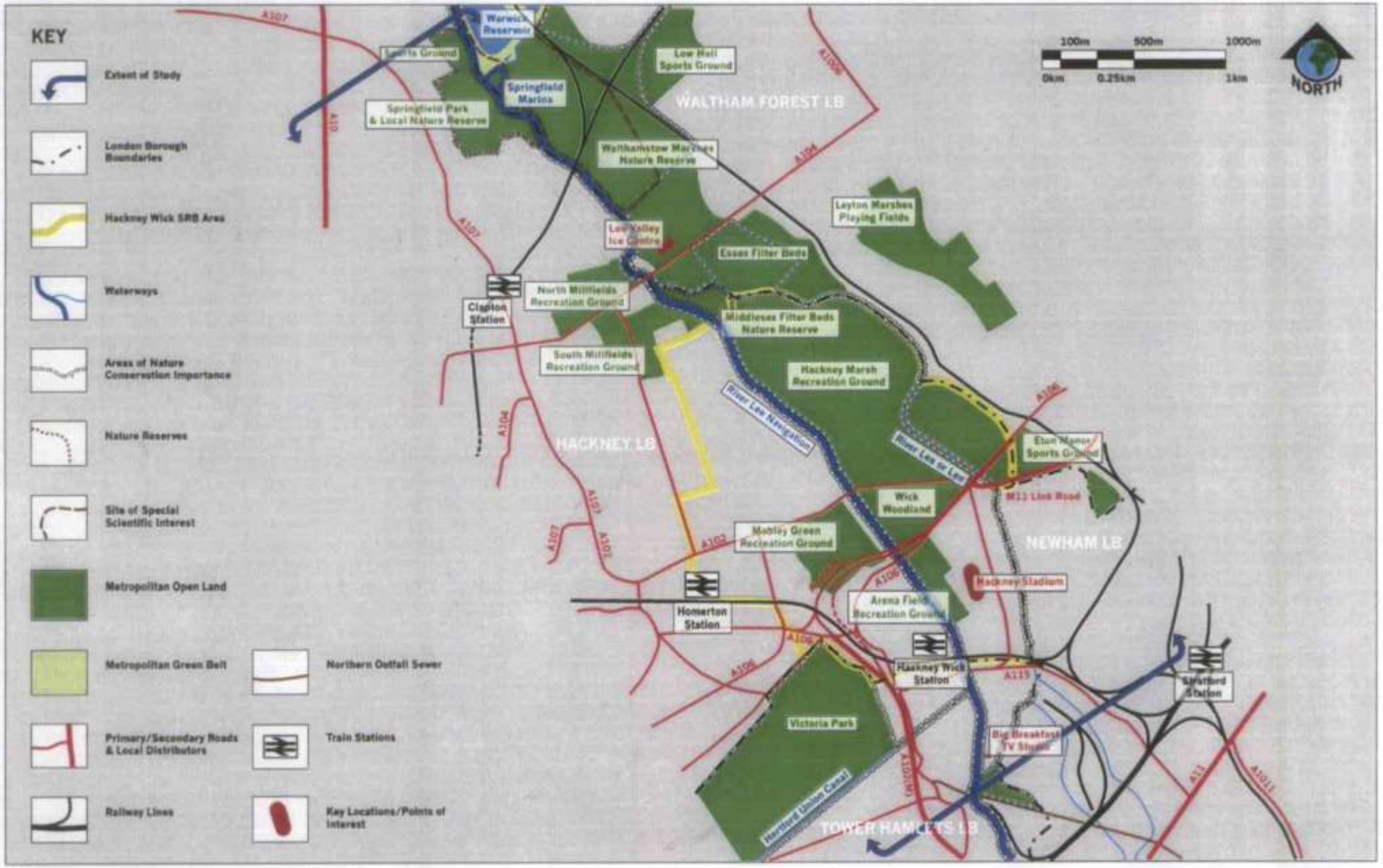
LAND USE

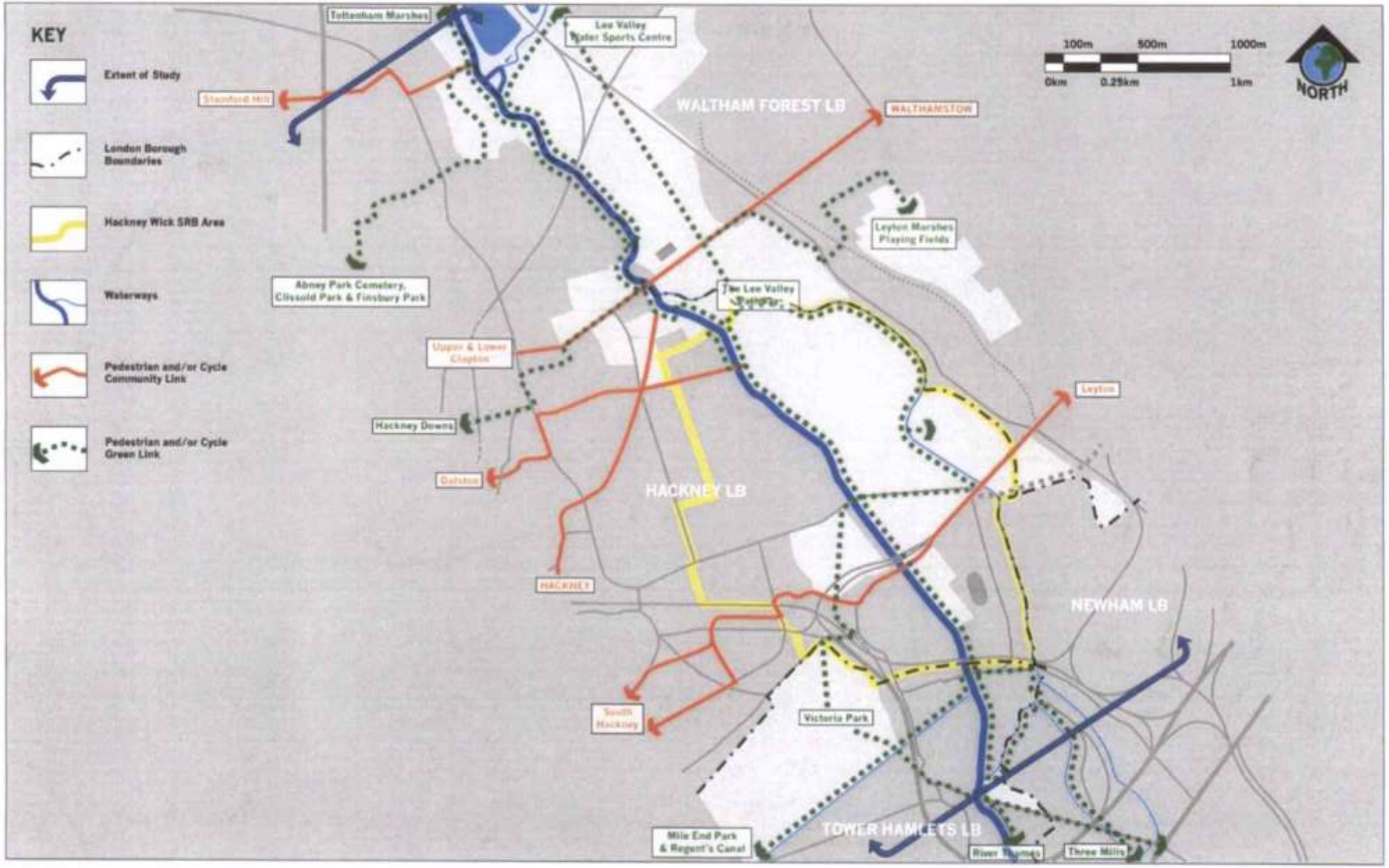
This stretch of the Lee Valley contains a discordant mix of land uses, including old, often unsightly industry and warehouses and recent commercial development (some now partially vacant) which are all predominantly found in the south of the corridor, below Hackney Stadium, east and west of the River Lee Navigation. Victorian terraced housing and modern residential estates which have, on the whole, been built to replace the ever diminishing tower blocks are mainly found on the western side of the River Lee Navigation. The most significant characteristic of this stretch of the Lee Valley is the River Lee Navigation and the wide open expanses of green that flank it, predominantly on the eastern side. The Lee Valley itself is lost in the sprawl of development but the River Lee Navigation and its green flanks still provide a visual corridor as well as a wildlife corridor linking the rural periphery of London with the River Thames. It is this green corridor that provides the identity to this area with the striking nationally well known open space of Hackney Marsh playing fields.

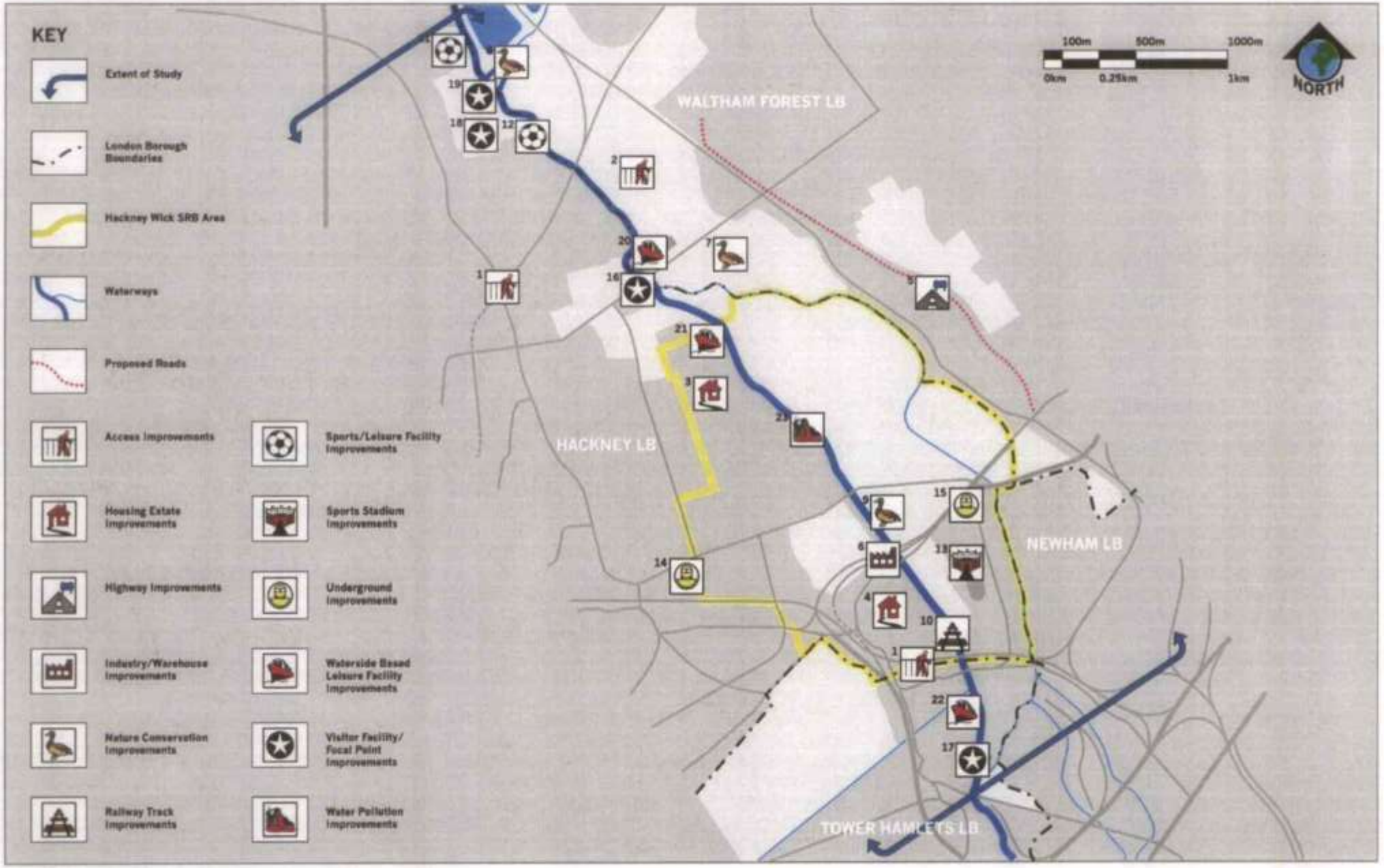
HISTORY

The River Lee has attracted and sustained human settlement for thousands of years and the rich history of this stretch is testified by ancient remains, including prehistoric axes, Roman coffins and medieval roads. Many local place names, including Hackney Wick, are of Saxon origin and remind us of the uninhabited marshland and scattered villages and farms which existed a thousand years ago. Few visible historic features have survived the development and re-development of much of the area, but the River Lee Navigation and open green spaces still survive with the Walthamstow Marshes Site of Special Scientific Interest giving us an insight into how the whole of the area might have once looked.


LONDON'S WATERWAYS
M25
RIVER LEE NAVIGATION
RIVER BRENT
STUDY AREA
GRAND UNION CANAL PADDINGTON ARM
REGENT'S CANAL
HERTFORD UNION CANAL
LIMEHOUSE CUT
SLOUGH ARM
RIVER THAMES
RIVER CRANE
THE LEE VALLEY
RIVER LEE NAVIGATION
RIVER STORT NAVIGATION
Turnford Brook
Nazeing Brook
LEE VALLEY REGIONAL PARK
Theobolds Brook
Turkey Brook
RIVER LEE NAVIGATION
King George Reservoir
William Girling Reservoir
Salmons Brook
Pymmes Brook
Mosselle Brook
Ching Brook
Walthamstow Group Reservoirs
STUDY AREA
Dagenham Brook
Abbey Creek
HERTFORD UNION CANAL
River Lea
LIMEHOUSE CUT
Bow Creek


KEY
Extent of Study
London Borough Boundaries
Hackney Wick SRB Area
Waterways
Areas of Nature Conservation Importance
Nature Reserves
Site of Special Scientific Interest
Metropolitan Open Land
Metropolitan Green Belt
Primary/Secondary Roads & Local Distributors
Railway Lines
Northern Outfall Sewer
Train Stations
Key Locations/Points of Interest
100m
500m
1000m
0km
0.25km
1km
NORTH
WALTHAM FOREST LB
HACKNEY LB
NEWHAM LB
TOWER HAMLETS LB
Warwick Reservoir
Low Hall Sports Ground
Springfield Park & Local Nature Reserve
Springfield Marina
Walthamstow Marshes Nature Reserve
Leyton Marshes Playing Fields
Lee Valley Ice Centre
Essex Filter Beds
North Millfields Recreation Ground
Clapton Station
Middlesex Filter Beds Nature Reserve
South Millfields Recreation Ground
Hackney Marsh Recreation Ground
River Lee Navigation
River Lee or Lee
Eton Manor Sports Ground
M11 Link Road
Wick Woodland
Mabley Green Recreation Ground
Hackney Stadium
Arena Field Recreation Ground
Homerton Station
Hackney Wick Station
Stratford Station
Victoria Park
Big Breakfast TV Studio
Hertford Union Canal
A107
A10
A104
A102
A106
A115
A11
A1011


KEY
Extent of Study
London Borough Boundaries
Hackney Wick SRB Area
Waterways
Pedestrian and/or Cycle Community Link
Pedestrian and/or Cycle Green Link
Tottenham Marshes
Lee Valley Water Sports Centre
Stamford Hill
WALTHAM FOREST LB
WALTHAMSTOW
100m
500m
1000m
0km
0.25km
1km
NORTH
Leyton Marshes Playing Fields
Abney Park Cemetery, Clissold Park & Finsbury Park
The Lee Valley
Upper & Lower Clapton
Hackney Downs
Dalston
HACKNEY LB
Leyton
HACKNEY
NEWHAM LB
South Hackney
Victoria Park
Mile End Park & Regent's Canal
TOWER HAMLETS LB
River Thames
Three Mills


KEY
Extent of Study
London Borough Boundaries
Hackney Wick SRB Area
Waterways
Proposed Roads
Access Improvements
Housing Estate Improvements
Highway Improvements
Industry/Warehouse Improvements
Nature Conservation Improvements
Railway Track Improvements
Sports/Leisure Facility Improvements
Sports Stadium Improvements
Underground Improvements
Waterside Based Leisure Facility Improvements
Visitor Facility/ Focal Point Improvements
Water Pollution Improvements
100m
500m
1000m
0km
0.25km
1km
NORTH
WALTHAM FOREST LB
HACKNEY LB
NEWHAM LB
TOWER HAMLETS LB

As set out in section 3, Planning & Policy, there is already an existing framework in place for delivering the lasting economic and environmental regeneration to the Lee Valley, mainly instigated by the Lee Valley Regional Park Authority in close consultation with the neighbouring London Boroughs. Through this, there are a series of existing/proposed development initiatives already in place along this stretch of the River Lee Navigation corridor. They are as follows :

ACCESS IMPROVEMENTS

1. **Pedestrian and Cycle Linkages :**

   Lee Valley Regional Park Authority

- *Footpath and cycle route connections with the Corridor to be provided especially from outside the Regional Park and from public transport nodes such as Hackney Wick Station and Clapton Station. Existing links and bridge crossings to be upgraded and pedestrian and cycle access along the towpath safeguarded.*

2. **Lee Valley Pathway Corridor :**

   Lee Valley Regional Park Authority

- *In the north, Coppermills Fields to be enhanced and incorporated into the Corridor for informal recreation use;*
- *The route of the Lee Valley Pathway to be secured and provided as part of new development on land within and adjoining the Regional Park;*
- *Connecting paths to be established, especially from the residential and industrial areas in the east and from the Low Hall area. Key entrance points onto the route to be created at Coppermill Lane, Lea Bridge Road, Eastway and Carpenters Road.*

HOUSING ESTATE IMPROVEMENTS

3. **Clapton Park, Nye Bevan and Millfields Estates :**

   London Borough of Hackney

- *Major estate redevelopment and refurbishment. A comprehensive Estates initiative;*

4. **Trowbridge Estate :**

   London Borough of Hackney

- *Major estate redevelopment and refurbishment. A comprehensive estates initiative*

HIGHWAY IMPROVEMENTS

5. **Leyton Relief Road (TSP13) :**

   London Borough of Waltham Forest

- *The Council will seek to secure improved access from Lea Bridge Road to the Argall Avenue Industrial Estate and the site of the former town gas works; and from Ruckholt Road to the Temple Mills Marshalling Yards and the former civil engineers' depot. In achieving such access the Council will take into consideration the need to maximise urban regeneration benefits and the effect on environmental conditions in adjoining areas. Any highway schemes will be considered against criteria set out in Policy TSP12,*
- *The Leyton Relief Road is the Council's preferred option for achieving comprehensive access arrangements to these sites. The design and construction of the road will need to satisfy the Council's Environment and Transport Policies and be compatible with operational railway users;*
- *The Council will oppose any proposals to extend the Leyton Relief Road northwards through the Lee Valley to provide a thorough route to Tottenham Hale.*

INDUSTRY/WAREHOUSE IMPROVEMENTS

6. **Former Lesneys Factory, Lee Conservancy Road :**

   London Borough of Hackney

- *Planning permission granted in 1995 for erection of a two storey storage/distribution building and a two storey business building.*

NATURE CONSERVATION IMPROVEMENTS

7. **Essex Filter Beds :**

   Lee Valley Regional Park Authority (SRB funded through London's Waterway Partnership)

- *Implementation of Master Plan to create a Nature Reserve, visitor centre and associated facilities including :*
- *Creation of a visitor reception building with interpretation of the area and educational and community facilities;*
- *New 'Gateway' entrance to the Regional Park;*
- *Creation of a wetland nature reserve with facilities which allow visitors to get close to wildlife;*
- *Improving the amenity and ecological value of the golf course and enhancing visitor enjoyment and use;*
- *Landscaping of the site, including road frontage, buffer land areas and screening of adjacent negative views;*
- *Creation of a new east-west footpath link across the Valley, to the site and to the adjacent Lee Valley Pathway a regional cycle and pedestrian route;*
- *Improvements to and provision of additional associated visitor facilities, including car parking, signage, bird viewing areas etc.*

8. **Horseshoe Island :**

   Lee Valley Regional Park Authority

- *The ecological interest of Horseshoe Island at Springfield Marina to be managed to complement the nature conservation value of the water corridor and adjoining sites to the east and south.*

9. **Waterway Green Edges :**

   Lee Valley Regional Park Authority

- *Existing green edges alongside the waterways to be protected and enhanced and new green edges established as part of developments adjacent to the water.*

RAILWAY TRACK IMPROVEMENTS

10. Channel Tunnel Rail Link :

Union Railways Ltd/London Borough of Hackney

- *Safeguarded corridor for the future development of the Channel Tunnel Rail Link. Most development proposals subject to consultation with Union Railways Ltd.*

SPORTS/LEISURE FACILITY IMPROVEMENTS

11. Leaside and Springhill Leisure Facilities :

12.

Lee Valley Regional Park Authority

- *The upgrading and modernisation of recreational and water based facilities at Springhill and Leaside to be supported where these increase the level of participation and where they are sensitively designed and located to minimise impact on the landscape and ecological interest of the area*

SPORTS STADIUM IMPROVEMENTS

13. Hackney Stadium and adjacent land :

London Borough of Hackney/Lee Valley Regional Park Authority

- *The Lee Valley Regional Park plans include a proposal for intensive leisure use and this proposal is reflected here in order to comply with the Lee Valley Regional Park Act 1966. The Council supports continued intensive leisure use of the Hackney Stadium in recognition of its important role in the Regional Park. Proposals for B1, B2 and B8 uses would be viewed in that light.*

UNDERGROUND IMPROVEMENTS

14. Chelsea – Hackney Underground Line (Homerton Station) :

London Underground Ltd/London Borough of Hackney

- *Safeguarded corridor for the future development of the Chelsea – Hackney Line/Homerton Station. Most development proposals subject to consultation with London Underground Ltd*

15. Chelsea – Hackney Underground Line (Wick Station) :

London Underground Ltd/London Borough of Hackney

- *Safeguarded corridor for the future development of the Chelsea – Hackney Line/Wick Station. Most development proposals subject to consultation with London Underground Ltd*

VISITOR FACILITY IMPROVEMENTS

16. Lea Bridge Road, Old Ford Lock, Springfield Park :

17. and Springfield Marina Visitor facilities :

18.

19.

Lee Valley Regional Park Authority

- *Visitor facilities on or adjacent to the towpath at Springfield Park, Springfield Marina, Lea Bridge Road and Old Ford Lock, to be enhanced and promoted as focal points along the corridor.*

WATERSIDE BASED LEISURE FACILITY IMPROVEMENTS

20. Essex and Eastwood Wharves (LAR 18) :

London Borough of Waltham Forest

- *The Council will seek to secure the comprehensive redevelopment of the site at Essex and Eastwood Wharves for Hotel, Conference Centre, and Leisure purposes*

Lee Valley Regional Park Authority

- *An attractive and sensitively designed waterside leisure facility at Essex and Eastwood Wharf to be developed as a new focal point and visitor attraction with the decontamination and opening up of the infilled oxbow immediately to the north to create a new waterside location for recreational use*

21. Former CEGB Power Station site, Millfields Road :

London Borough of Hackney

- *Safeguarded for class B1, B2 development. Canalside strip may also be suitable for residential moorings.*

22. Site on the junction of the Hertford Union and the River Lee Navigation :

London Borough of Tower Hamlets

- *Leisure – water based leisure uses.*

WATER POLLUTION IMPROVEMENTS

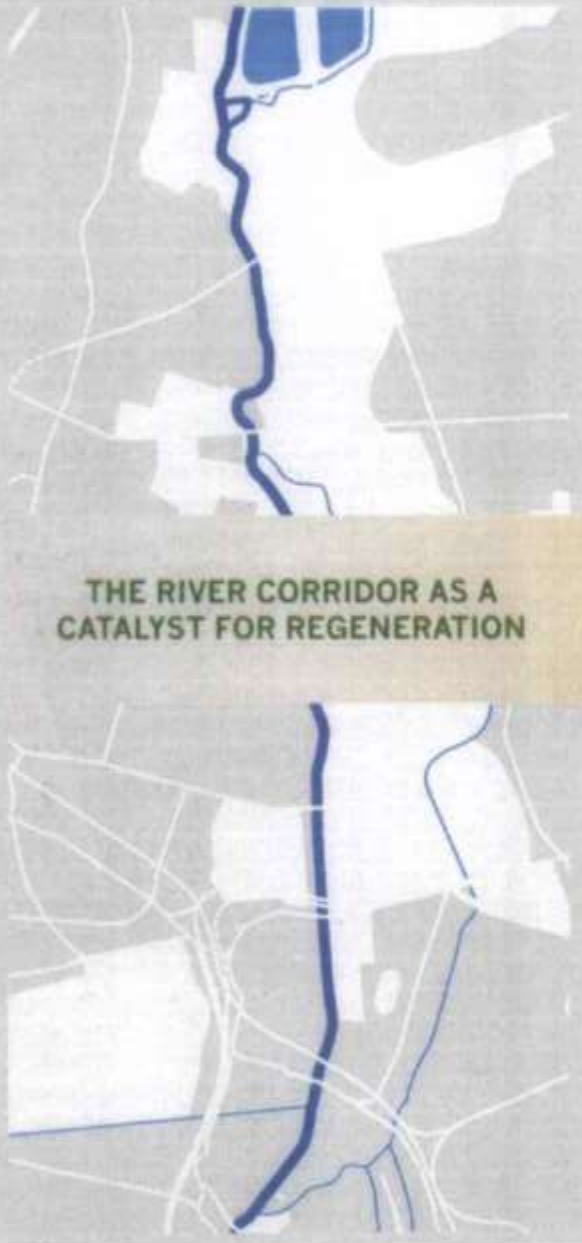
23. Water Quality

Lee Valley Regional Park Authority

- *Water quality to be improved to meet standards for immersion water sports and sources of water pollution addressed.*

3 PLANNING & POLICY

PROJECT AIM



THE RIVER CORRIDOR AS A CATALYST FOR REGENERATION

PROJECT DELIVERERS

- BRITISH WATERWAYS
- GROUNDWORK HACKNEY
- HACKNEY WICK REGENERATION PARTNERSHIP
- LEE VALLEY REGIONAL PARK AUTHORITY
- LOCAL COMMUNITY GROUPS
- LONDON BOROUGH OF HACKNEY
- LONDON BOROUGH OF TOWER HAMLETS
- LONDON BOROUGH OF WALTHAM FOREST
- LOWER LEA PROJECT

VISION

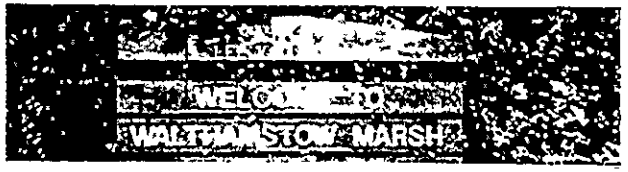
BRITISH WATERWAYS
LONDON REGION BUSINESS PLAN – 1999/2000

ENVIRONMENTAL RESOURCES MANAGEMENT
ENVIRONMENTAL AUDIT : HACKNEY WICK –1998
(LONDON BOROUGH OF HACKNEY ON BEHALF OF HACKNEY WICK REGENERATION PARTNERSHIP).

HACKNEY WICK REGENERATION PARTNERSHIP
SINGLE REGENERATION BUDGET (SRB) CHALLENGE FUND DELIVERY PLAN – 1999/2000

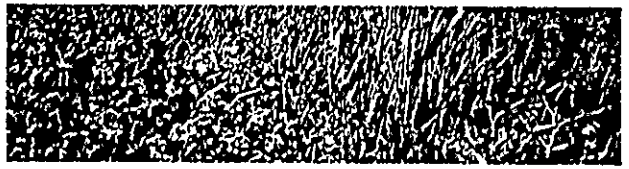
The aforementioned documents have identified the need and the benefits which would arise from an Action Plan for the River Lee Navigation.

LEE VALLEY REGIONAL PARK AUTHORITY
PARK PLAN PART ONE : STRATEGIC POLICY FRAMEWORK – 1998



LEE VALLEY REGIONAL PARK AUTHORITY
PARK PLAN PART TWO : PROPOSALS – DRAFT 2000

LEE VALLEY REGIONAL PARK AUTHORITY
BIODIVERSITY ACTION PLAN – 2000



These documents have proved invaluable in determining the existing framework already in place for delivering the lasting economic and environmental regeneration to the River Lee to take it into the next century. They help to give a wider context to how this small stretch of the River Lee can be regenerated, primarily for the benefit of its neighbouring inhabitants but also for its more strategic role as a green corridor linking the rural periphery of London to the River Thames in central London.

LONDON BOROUGH OF HACKNEY
UNITARY DEVELOPMENT PLAN (UDP) – 1995

LONDON BOROUGH OF TOWER HAMLETS
UNITARY DEVELOPMENT PLAN (UDP) – 1992

LONDON BOROUGH OF WALTHAM FOREST
UNITARY DEVELOPMENT PLAN (UDP) – 1996

The key policies, aims and objectives and visions set out by these documents are as follows:

BRITISH WATERWAYS

LONDON REGION BUSINESS PLAN – 1999/2000

Vision

- *London Canals will become a flagship waterway and a major tourism and heritage attraction. Centres of vibrant activity contrast with areas of peace and tranquillity to create a rich and varied environment to be enjoyed;*
- *A programme of economic and environmental regeneration and business development, harnessing key partnerships and funding, particularly London's Waterway Partnership, will revitalise the waterway and raise its profile in the capital city.*

Strategic Objectives

- *Strengthen the identity of the waterway unit as a flagship waterway;*
- *Improve availability and accessibility to a wider range of customer groups ensuring issues of public safety are fully addressed and using this opportunity to improve the quality of the waterway environs;*
- *Establish better community links through liaison and education initiatives to engage local people in the regeneration and environmental protection of their canals;*
- *Improve the quality of the waterway environment and customer facilities in line with waterway standards that befit the capital city and which are consistent with the objectives of the contract with Government.*

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL AUDIT : HACKNEY WICK – 1998

(London Borough of Hackney on behalf of Hackney Wick Regeneration Partnership)

Statement of Objectives (specific to River Lee Navigation Corridor)

Ecology and Nature Conservation

- *Protect existing wildlife resources;*
- *Develop a co-ordinated nature conservation strategy in consultation with and with the support of other relevant bodies and local authorities;*
- *Create and manage wetland habitats, particularly south of the Middlesex Filter Beds;*
- *Create 'natural' bank profiles along the Lee Navigation Hackney Cut to encourage colonisation by plants,*
- *Control monocultures of invasive alien species to encourage greater species diversity;*
- *Continue management and extension of the semi-natural grassland south of the Middlesex Filter Beds;*
- *Management of Wick Wood partly for wildlife benefit;*
- *Control and clearance of littered areas and sections of watercourse.*

Landscape Resources

- *Develop co-ordinated landscape measures in consultation with and with the support of other relevant bodies;*
- *Increase the diversity of landscape features on open land;*
- *Encourage landscape design and provision of managed open space as part of all new development,*
- *Reclaim areas of derelict land;*
- *Protect and improve the setting of heritage features;*
- *Ensure lighting design adopts current best practice to avoid light spillage and pollution;*
- *Establish a recurrent landscape theme to help visually unify the area and create an identity;*
- *Improve access and encourage wider use of open space.*

Landscape Resources (Hackney Marsh)

- *Increase visual and ecological interest through creation of woodland pockets and different habitats (co-ordinate with tree planting programme);*
- *Encourage natural landscape character of predominantly large scale, such as semi-natural grassland, but with pockets of enclosed 'wilderness';*
- *Provide a variety of landscaped pathways for cyclists and pedestrians;*
- *Consider enhancing long views of distant features within the landscape strategy through careful alignment of new planting and pathways Control of parking on the east of Homerton Road will also help to reduce visual intrusion into views across the Marsh;*
- *Through edge planting with tree clumps, create more varied views from surrounding roads and houses, imposing alternate short, medium and long views (co-ordinate with environmental planting programme);*
- *Similarly seek to entice people onto the Marsh through imaginative edge planting – the current green expanse, while*

providing an invaluable sense of space, is also rather daunting for users at its edge;

- *Along the riverside, create tranquil attractive riverside walks which contrast with open spaces;*
- *Introduce formal recreational facilities (skate parks, playgrounds, acceptable to public open space designation) to encourage wider use by the community (co-ordinate with the Hackney Marshes Adventure Playground programme).*

Landscape Resources (Kings Park and Hackney Cut)

- *Retain and maximise views across Hackney Marsh, framing key views with informal tree planting;*
- *Introduce tree and shrub planting, ground modelling and landscaped pathways on some verges and open areas;*
- *Introduce small, landscaped playgrounds.*

Landscape Resources (Power Station)

- *Utilise proximity to canal within any development of the vacant land, introducing tree planting along the canal side to create strong visual edge;*
- *Introduce tree planting along northern edge to screen and disrupt views of transmission lines;*
- *Consider long views from across the Marsh in the design, massing and skyline of new development on this prominent site*

Landscape Resources (East Cross Route)

- *Introduce avenue tree planting along East Cross Route and Eastway to reflect that along Homerton Road. Additional visual and acoustic screening (eg with earth bunds) along the East Cross Route would also yield considerable amenity benefits;*
- *Use native tree planting to augment and accelerate natural regeneration of islanded pockets (co-ordinate with tree planting programme);*
- *Use well designed lighting to create a unified and coherent image for the area.*

Historic and Archaeological Resources

- *Create and support local interest amongst schools and individuals, eg by development of an information centre, by creation of information boards at appropriate locations or by exhibition at existing educational initiatives.*

Surface Water Resources

- *Although river channels have largely been engineered to cope with flood flows and to accommodate new development, the protection should be maintained in order to protect people and property;*
- *Initiatives to monitor and improve water quality should be co-ordinated with neighbouring local authorities, the British Waterways Board and the Environment Agency to ensure a coherent and effective approach;*
- *Install booms upstream, at the Lee Bridge Weir, and downstream, under Temple Mills Bridge, together with a regular cleaning regime to help to relieve litter pollution in the Wick and further downstream.*

HACKNEY WICK REGENERATION PARTNERSHIP

SINGLE REGENERATION BUDGET (SRB) CHALLENGE FUND DELIVERY PLAN – 1999/00

Vision

The Hackney Wick Regeneration Partnership sets out its purpose as:

- *The transformation of Hackney Wick to place it on a sound footing for sustained regeneration well into the twenty first century. The long term strategy is to ensure that Hackney Wick contributes to and gains from the development of Stratford as both a hub for international communications and a key centre for growth in the east London economy*

Strategic Objectives

The Delivery Plan seeks to achieve the strategic objectives as specified in the SRB Guidance by the Government Office for London of:

- *Enhancing the employment prospects of local people (S01);*
- *Encouraging sustained economic growth (S02);*
- *Tackling social exclusion (S03, S04, S06 and S07).*

The specific strategic objectives relating to this study are set out below:

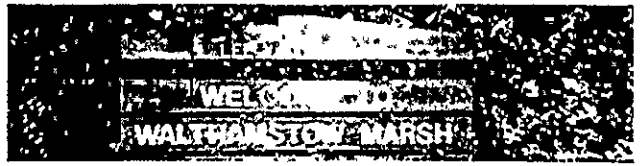
- ***Development for Business (S02) :***
  Sites and premises development, business competitiveness and access studies;

- ***Action with the Community : An Improved Environment (S03) :***
  Site improvements, creating habitats, resource management, cycle paths and street improvements;

- ***Action with the Community : A Safer Place to Live (S06) :***
  Improving security, community safety and crime prevention;

- ***Action with the Community : Supporting Community Action (S07) :***
  Health support, opportunities for sport and community development.

LEE VALLEY REGIONAL PARK AUTHORITY



The vision for the Regional Park provides a balanced strategy to meet the recreation, leisure and nature conservation needs of the regional population and ensure the resources of the Park are available for future generations.

The objectives provide guidance on the future planning, development and management of the resources so that the long term vision for the Regional Park can be achieved

Vision for the Regional Park:

- *To be a cohesive, sustainable and valued regional green lung;*
- *To be an area of enhanced and protected natural bio-diversity for the enjoyment of all;*
- *To achieve full utilisation of the unique land and water assets of the Regional Park for specialist leisure and recreational facilities developed in accordance with principles of sustainability and design excellence;*
- *To be an accessible and permeable, integrated visitor attraction to serve the region which will include local communities.*

LEE VALLEY REGIONAL PARK AUTHORITY

PARK PLAN PART ONE : STRATEGIC POLICY FRAMEWORK - 1998

Resource Objectives

Culture & Heritage

- *CHR1 - To protect, conserve, enhance and develop the culture and heritage resources of the Regional Park and recognise the value of these resources in providing opportunities for leisure and recreation;*
- *CHR2 - To ensure that culture and heritage resources are protected, managed and developed according to the principles of sustainable development.*

Land Resource

- *L1 - To maintain and protect the openness of the Regional Park as a key feature of the land resource which contributes to the quality of life, leisure experience and the structure of the Region;*
- *L2 – To safeguard the whole land resource, including buildings and other features and to ensure its long term availability for purposes appropriate to the Regional Park;*
- *L3 – To ensure the use of the land resource in a manner that will best achieve the purpose of the Regional Park;*
- *L4 – To achieve high standards for the quality of existing and new development in and around the Regional Park.*

Landscape

- *LS1 – To develop a positive identity for the landscape of the Regional Park by creating a coherent, unique and distinctive place in which the importance of local landscape character is recognised and protected;*
- *LS2 – To create a more legible landscape structure which promotes a sense of place and an appreciation of the Regional Park as an integrated green landscape and recreational resource;*
- *LS3 – To promote creativity, consistency and excellence in all areas of landscape management and maintenance,*
- *LS4 – To ensure that landscape development and management is carried out with regard to the sustainable use of resources and the protection and enhancement of biodiversity;*
- *LS5 – To pursue the highest levels of quality achievement in landscape design and management with regard to developing, protecting and enhancing the landscape.*

Nature Conservation

- *NC1 – To form an ecologically integrated river floodplain corridor;*
- *NC2 – To realise the full ecological potential of the Regional Park by protecting, maintaining and enhancing the present range of species, habitats and landscape features combined with extensive re-creation and expansion of key habitat types;*
- *NC3 – To achieve sustainable use of the natural resource of the Regional Park;*
- *NC4 – To achieve awareness and understanding of the natural resource of the Regional Park and to encourage participation in its conservation*

Water Resource

- *W1 – To ensure that use of the water resource does not degrade its recreational, heritage, landscape or nature conservation value;*
- *W2 – To safeguard the system of canals, rivers, streams, lakes and other water features which together form a special resource not generally found, or easily recreated elsewhere;*
- *W3 – To seek improvement in the water quality of the rivers, navigations and enclosed waters to a standard appropriate to their use for leisure, recreation and nature conservation;*
- *W4 – An integrated approach to the planning and management of the water resource should be adopted to strengthen the role of the rivers, navigation and enclosed water bodies and realise their full potential.*

LEE VALLEY REGIONAL PARK AUTHORITY

PARK PLAN PART TWO : PROPOSALS – DRAFT 2000

Park – Wide Proposals

WC – Waterway Corridor

- *A waterway corridor to be created, integrating the active and passive recreational use of the water, working and industrial heritage, waterside open space, waterway activity focal points and economic and environmental regeneration initiatives through:*

1. *The protection of the system of canals, rivers and associated open spaces and buildings as a corridor for recreation, landscape and amenity value;*
2. *The development of uses and activities which respect, conserve and enhance the water and waterside environment and provide for the active and passive recreational enjoyment of the waterway corridor;*
3. *The promotion of the recreational use of navigable waterways and the provision of adequate services in appropriate locations;*
4. *The celebration of the distinctive character of each section of the corridor, unified by a consistent approach to quality and overall development principles;*
5. *Development on sites adjoining the waterway being designed and located to:*
   - *Improve the waterway environment,*
   - *Safeguard access links through onto the towpath and the navigation,*
   - *Maintain views out across the Regional Park,*

– *Preserve and interpret the heritage of the waterways and be complementary to the use of the waterway and the Regional Park;*

6. *The protection, enhancement and management of the ecology of the water and waterside environment to meet biodiversity targets for the rivers and streams habitat;*

7. *The improvement and promotion of public access by foot, cycle and boat through the Regional Park;*

8. *The protection and enhancement of the traditional waterway features, buildings and furniture of the canals;*

9. *The protection, enhancement and provision of bridges and other structures that provide character to the Regional Park, create local landmarks and enable people to experience the water;*

10. *The improvement of the biological, chemical and aesthetic quality of the water to provide a suitable environment for recreation, leisure or nature conservation;*

11. *The mitigation of the adverse impact of road and rail crossings and existing built development;*

12. *The implementation of Section Specific Waterway Corridor Proposals WC 1-8*

PW – Lee Valley Pathway Corridor

- *A continuous corridor of open space to be created the length of the Regional Park containing the Lee Valley Pathway, a shared use path for walkers and cyclists, through:*

1. *The restoration of a corridor of attractive open space to contain the path, providing ancillary facilities for informal recreation;*

2. *The improvement of areas of weak or fragmented landscape character to enhance the recreational and leisure experience;*

3. *The highlighting of views out to the rural valley sides and to key landmarks both within and beyond the Regional Park;*

4. *The creation of a path with suitable surfaces and safe access through and across individual sites throughout the length of the Regional Park,*

5. *The safeguarding of the route, in particular through new development sites,*

6. *The provision of safe crossings of roads and traffic calming where roads are shared with the path;*

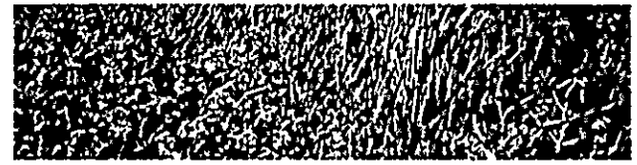
7. *The provision of additional links and waymarking into the path from public transport nodes, existing paths, the Waterway Corridor, adjoining communities and other recreational and leisure areas;*

8. *The acquisition of land, by the Authority if necessary, to protect the corridor;*

9. *The implementation of Section-specific Pathway Corridor Proposals PW 1-8*

LEE VALLEY REGIONAL PARK AUTHORITY

BIODIVERSITY ACTION PLAN - 2000



Long-Term Ecological Objectives

- *To create, restore and link characteristic ecological, hydrological and landscape features to form a fully integrated river floodplain corridor;*

- *To realise the full ecological potential of the Lee Valley Regional Park by maintaining and enhancing the present range of species, habitats and landscape features combined with extensive re-creation and expansion of key habitat types;*

- *To achieve a sustainable use of the natural resource;*

- *To achieve awareness and understanding of the biodiversity of the Lee Valley Regional Park and to encourage participation in its conservation.*

Action Plan Objectives

Rivers & Streams

- *To maintain and enhance the quality of rivers and streams by achieving sympathetic and appropriate management of existing high value stretches while restoring degraded stretches. The target is to increase by 50% within 10 years the length of water course considered to be of high ecological value,*

- *To see improvement in water quality. The term 'improvement' will need further definition It may be seen as a reduction in pollution incidents or in specific parameters such as the level of*

nitrate or phosphate. The objectives for water quality and channel structure are seen to require a parallel approach

Floodplain Grassland and Fen

- *To achieve sympathetic and appropriate management of all floodplain grassland and fen habitats of nature conservation importance within 5 years;*
- *To expand and enhance key areas under appropriate management to form extensive wetland habitat mosaics of at least 50 hectares in extent;*
- *To ensure the following habitat types remain represented within the Lee Valley Regional Park at a level equal or greater than the current resource and implementing restoration and re-creation programmes for the most threatened of habitats:*
  - ***Ancient fen meadows** : fully restore all the remaining resourse;*
  - ***Wet grassland** : increase to a minimum of 30 hectares of managed wet grassland,*
  - ***Rough grassland** : maintain and enhance resource at current level.*

Urban Habitats

1 ***Encapsulated countryside** – areas of semi-natural habitat which persist in the urban area from a more rural past;*

2 ***Managed greenspace** – those areas managed for recreation or amenity such as gardens, parks, school grounds and roadside verges;*

3. ***Naturally regenerating habitats and 'urban commons'** – areas of disturbed ground or non-natural substrate which develop their own self-seeded plant and animal communities; and*

4. ***Urban wetlands** – urban rivers and watercourses, ponds and lakes.*

- *To achieve sympathetic and appropriate management of all urban habitats of nature conservation significance within 5 years;*
- *To increase community involvement in managing urban habitats by establishing and supporting conservation volunteer groups.*

Otter

- *To maintain the existing released otter population thus supporting the wider objectives of achieving a viable population in Hertfordshire river catchments;*
- *To create a rolling programme of river enhancement schemes and incorporate action for otters in all relevant local management plans*

Water Voles

- *To maintain the current distribution and abundance of water voles in the Lee Valley;*
- *To facilitate re-colonisation of past sites within 10 years through enhancement of existing habitat and populations*

Early Marsh Orchids

- *To retain viable populations of early marsh orchids at all presently known locations;*
- *To increase the population sizes of threatened colonies.*

Kingfisher

- *To maintain the current population and range of kingfishers in the Regional Park;*
- *To facilitate the colonisation of new water bodies and courses through the enhancement and creation of suitable riparian habitats.*

LONDON BOROUGH OF HACKNEY

UNITARY DEVELOPMENT PLAN (UDP) – 1995

Designations

In Hackney the River Lee Navigation has been classified as:

- *An Area of Archaeological Priority;*
- *An Area of Nature Conservation Importance;*
- *An Area of Special Landscape Character;*
- *Metropolitan Open Land and Green Chain*

In addition to these the River Lee Navigation falls within the Lee Valley Regional Park and lies adjacent to Middlesex Filter Beds Nature Reserve and Springfield Park Local Nature Reserve.

Strategic Policies

Environmental Quality

- ***ST9** – The Council will protect Metropolitan Open Land,*
- ***ST10** – The Council will have regard to the provisions of the Lee Valley Regional Park Plan;*
- ***ST12** – The Council will protect and enhance the special value of canals and the River Lee and Lee Navigation,*
- ***ST13** – The Council will protect and enhance Sites and Areas of Importance to Nature Conservation.*

Open Space and Nature Conservation

- ***ST39** – The Council will retain, create and protect and enhance the character of a hierarchy of publicly accessibly open spaces providing regional parks and open spaces, district parks, local parks, small local parks and open spaces, linear open spaces and green chains;*
- ***ST41** – The Council will seek to realise the potential of Metropolitan Open Land and other open spaces to provide for a wide range of appropriate and accessible leisure facilities for sports, arts and water based leisure activities*

Policies

Environmental Quality

- ***EQ9 – Development and the River Lee Navigation floodplain :***

  In areas at risk from flooding, the council will, where appropriate, require flood protection measures to be included in development proposals The flood protection measures to be included in developments will be defined by the council in consultation with the National Rivers Authority and British Waterways;

- ***EQ21 – Metropolitan Open Land :***

  The Council will seek to ensure that the areas shown as Metropolitan Open Land on the proposals map remain in predominantly open use. Any built development should be associated with the open space, nature conservation and/or recreational use of Metropolitan Open Land, and will be subject to the following requirements·

1. That its prime function should be ancillary to the maintenance or use of the adjoining open land,
2. That, wherever possible, new buildings are sited close to existing built development or on the periphery of the open land;
3. That it has a high standard of design and landscaping

- ***EQ23 – Development Affecting the Park :***

  The Council will require development in or near the Lee Valley Regional Park shown on the UDP proposals map to take account of the special landscape and open water character and, where appropriate, to retain, improve or provide public access particularly for pedestrians, cyclists and those arriving by public transport;

- ***EQ24 – Canalside Development Proposals:***

  In considering proposals which affect the canalside environment, the Council will take account of.

1. *Long distance and local views;*
2. *Wildlife habitats;*
3. *Opportunities created for public access*

- ***EQ25 – Water-related Uses :***

  The Council will support proposals for water related uses which contribute to the traditional character of the Regent's Canal and River Lee Navigation;

- ***EQ26 – Canals and Nature Conservation :***

  The Council will seek to protect and enhance the nature conservation interest of the Regent's Canal, the River Lee and the Lee Navigation and encourage the creation of new wildlife habitats as part of new development;

- ***EQ27 – Residential Moorings :***

  The Council may permit residential moorings subject to other policies in the UDP if it is satisfied:

1. *That they are located on the non-towing side of the canal close to amenities and public transport;*
2. *That adequate and managed service facilities are provided for each mooring.*

- ***EQ30 – Areas of Special Landscape Character :***

  The Council will expect proposals within, adjacent to or affecting the areas of Special Landscape Character shown on the UDP proposals map to respect and enhance the unique character of these areas through.

1. *Appropriate layout, design, boundary treatment and planting,*

2 *Protection of opportunities for access to associated towpaths / public footpaths;*

3. *Retention and enhancement of special features*

Transport

- ***TR15 – Canals and the River Lee Navigation :***

  The Council will favourably consider proposals which support leisure and freight movement on the Regent's Canal and River Lee Navigation subject to other policies in the UDP.

Open Spaces and Nature Conservation

- ***OS1 – Enhancing Metropolitan Open Land***

  The Council will give favourable consideration to proposals which will enhance the appearance and attractiveness of Metropolitan Open Land for leisure activities, subject to other policies in the UDP;

- ***OS6 – Green Chains and Links :***

  The Council will seek to protect and enhance the areas identified as Green Chains and Links on the UDP Proposals Map,

  Where opportunities arise, the Council will normally require appropriate development schemes to facilitate the creation of Green Links and enhance adjoining Green Chains;

- ***OS9 – Recreational Footpaths, Towing Paths, Cycleways and Bridleways :***

  The Council will seek to protect and enhance existing routes to and through open spaces and places of interest. Where opportunities arise, the Council will expect routes to be linked, to form a wider network,

- ***OS12 – Protection of Open Water Areas :***

  The Council will not normally permit development which results in the loss of open water areas;

- ***OS13 – Access and Use of Water Areas :***

  The Council will pursue opportunities for public access to water-based and water-related leisure activities and will seek to maximise the potential of open water areas for leisure and/or nature conservation pursuits, commensurate with the need to safeguard the quality of water supplies;

- ***OS15 – Restriction of development affecting the proposed Walthamstow Reservoirs Special Protection Area, Sites of Special Scientific Interest and Local Nature Reserves :***

  Development will not be permitted close to the proposed Walthamstow Reservoirs Special Protection Area, or within or close to Sites of Special Scientific Interest and Local Nature Reserves unless it can be shown that there would be no significant damage to the nature conservation interest;

- ***OS16 – Development and Areas of Nature Conservation Importance :***

  The Council will not normally permit development within areas of Nature Conservation Importance shown on the proposals map, and will expect proposals for development within or adjacent to such areas to take account of their ecological importance, and give attention to their protection, enhancement and proper management;

- ***OS17 – Wildlife Habitats :***

  The Council will support proposals which provide or enhance a range of wildlife habitats;

- ***OS18 – Information and Interpretation :***

  The Council will support the provision of wildlife information and interpretation facilities and it will promote environmental education by ensuring that all schools and local people have access to areas for appreciating and studying the natural environment.

LONDON BOROUGH OF TOWER HAMLETS

UNITARY DEVELOPMENT PLAN (UDP) – 1992

Designations

In Tower Hamlets the River Lee Navigation has been classified as:

- *Area of Archaeological Importance or Potential;*
- *Green Chain;*
- *Site of Nature Conservation Importance.*

In addition to these the River Lee Navigation towpath falls within the Lee Valley Regional Park and a small stretch lies adjacent to Stratford Marsh Metropolitan Open Land

Strategic Policies

The Environment

- **ST4** – *To ensure that development contributes to a safe, welcoming and attractive environment which is accessible to all groups of people,*
- **ST7** – *To protect and enhance Areas of Nature Conservation Importance and to encourage the creation of new wildlife habitats*

Transport

- **ST30** – *To reduce the impact of heavy lorry traffic by promoting greater use of rail and water for the movement of freight.*

Open Space, Sport and Recreation

- **ST34** – *To improve the physical appearance of the Borough by creating a more attractive environment for those who live and work here by maintaining and enhancing the Borough's existing parks and other open spaces;*
- *ST35 – To provide and increase the range of leisure and recreational facilities where a need is demonstrated and opportunities arise;*
- *ST36 – To ensure participation in recreational facilities is safe and accessible for all to use and enjoy;*
- *ST37 – To support the Lea Valley Regional Park Authority and their proposals within the context of the Council's open space policies.*

Policies

The Environment

- ***DEV44 – Protection of Waterway Corridors:***

Waterways and Water Bodies will be protected and promoted for their contribution to the character of the Borough and as important open areas within the Borough by :

1. *Conserving existing areas of value and, where possible seeking to restore and enhance the natural elements of the Waterway Environment;*
2. *Supporting initiatives which will result in improvements to water quality,*
3. *Where appropriate promoting public access in waterway corridors;*
4. *Identifying appropriate locations for water related recreation along waterway corridors subject to Nature Conservation considerations; and*
5. *Not normally permitting development which will have an adverse impact on the water environment, on public access to waterways and on water related recreation.*

- ***DEV45 – Development Affecting Water Areas :***

New Development Proposals adjacent to the rivers, canals and other water areas will be expected to :

1. *Retain, and if necessary, convert structurally sound and architecturally interesting buildings or groups of buildings;*
2. *Retain and/or re-use historic artifacts, materials and features;*
3. *Be designed to conform to the general scale and form of the waterside environment or the scale and form of immediate riparian neighbours,*
4. *Maintain important views into and out of the area;*
5. *Provide access to the waterside in accordance with Planning Standards 7 and 8 on riverside walkways and canalside development; and*
6. *Not have an adverse effect on Nature Conservation;*

- ***DEV 46 – Riverside Walkways and New Development :***

New development having a water frontage along the Thames and the River Lea will be expected to provide a walkway to an acceptable standard. Planning Standard Number 7 : Riverside Walkways indicates a standard which is acceptable;

- ***DEV 47 – Appropriate uses Along Waterways :***

Subject to other policies in the UDP, proposals for uses which are appropriate to waterside areas will be favourably considered These uses include traditional waterside industries (such as boatyards), leisure, tourism, recreational and Nature Conservation uses Existing transport related waterside uses will normally be expected to remain in such use;

- ***DEV 48 – Loss of River Foreshore :***

Development proposals which involve loss of River Foreshore will not normally be permitted;

- ***DEV 49 – Moored Vessels and Structures :***

Proposals for moored vessels and structures in or over river or dock areas will only be permitted of they are essential to the movements of goods or passengers by water, or lead to an increase in the recreational use of the river, docks or basins Such developments should :

1. *Be of a scale and design appropriate to the location and kept in good state of repair and maintenance;*
2. *Not interfere with navigation, give rise to siltation problems or affect the integrity of river walls and flood defences;*
3. *Meet policies related to the setting of conservation areas, the setting of a listed building, and local and strategic views,*
4. *Not impede access to water areas;*
5. *Be accessible to people with disabilities,*
6. *Accord with policies and standards related to ecology and conservation;*
7. *Accord with the policies related to traffic generation and the standards for vehicle parking, servicing, and circulation; and*
8. *Accord with the policies and standards related to the amenity of nearby users through loss of privacy, noise, pollution, late night activity and other nuisances;*

- ***DEV 58 – Development Affecting Nature Conservation Areas :***

The Council will not normally permit development which adversely affects a local Nature Reserve, a site of Nature Conservation Importance or a Green Chain;

- ***DEV 59 – Enhancement of Nature Conservation Sites:***

Proposals which enhance the Nature Conservation value of sites or Green Chains will receive favourable consideration subject to other policies in the UDP;

- ***DEV 60 – Nature Conservation as a Land Use :***

Nature Conservation is considered to be an appropriate land use for all open space;

- ***DEV 61 – Vacant/Derelict Land as Nature Areas:***

The use and management of vacant or derelict land and other open spaces for Nature Conservation purposes will be promoted;

- ***DEV 62 – Management of Nature Conservation Areas:***

  Nature Conservation will be promoted in the management of council owned land by the production of Management Plans for important areas and by establishing ecological landscape design and management techniques. Other landowners will be encouraged to adopt a similar policy;

- ***DEV 63 – Development Adversely Affecting Nature Conservation Areas :***

  Where development proposals would destroy or adversely affect the ecologies of Sites of Nature Conservation Importance, the Council will normally seek their retention or replacement. The creation and enhancement of nature conservation features and the provision of public access may be sought in new developments;

- ***DEV 64 – Designation of Green Chains :***

  The Council designates the sites shown on the UDP proposals map and the schedules as Green Chains. Within these areas, improved access including links with adjacent pedestrian routes, enhancement of their recreation potential, and the development of their value as natural habitats for wild animal and plant life will be sought;

- **DEV 66 – Protection of Existing Walkways :**

  Existing walkways will be protected from development which would prevent free public access and/or harm their character;

Housing

- **HSG 24 – Residential Moorings :**

  The Council will consider applications for permanent and temporary residential mooring providing they meet the requirements of the Council's policies for riverside, canalside and dockside developments, see policies DEV 44 to DEV 49.

Transport

- **T23 – Strategic Pedestrian Route :**

  The Council will support the improvement of pedestrian facilities along the Canal and Riversides and the Northern Sewer Outfall Embankment in collaboration with adjoining Boroughs to form a strategic pedestrian route network;

- **T25 – Cyclists Needs in New Developments :**

  Cycle routes will be introduced in accordance with LPAC's strategic network in liaison with adjoining boroughs and the Lee Valley Regional Park Authority using, wherever possible, local access roads and the Green Chain. Provision for cycle lanes and cycle crossings will be made where the cycle routes use the primary or secondary network,

- ***T30 – Use of the Waterways for Freight :***

  The maximum feasible use of the waterways for the movement of freight and bulky goods will be encouraged.

Open Space, Leisure and Recreation

- ***OS7 – Loss of Open Space :***

  Planning permission will not normally be given for any development which results in the loss of public or private open space except where such development is ancillary to and complements the outdoor recreational use or where the development affects temporary open space;

- ***OS15 - Lea Valley Regional Park :***

  The Council will support the Lea Valley Regional Park Authority and their plan for the development of outdoor sport and leisure activities and Nature Conservation within the context of the Council's Open Space Policies

Planning Standards

Planning Standard No. 8 – Canalside Development

The Towpath

- *The towpath will be opened to the public wherever possible. Where continuity of the path is broken, obstructions will be removed or an alternative route created;*

- *Wherever possible, signposted access points will be incorporated into new development adjacent to the towpath, subject to the British Waterways Board agreement. This will assist in integrating the towpath with the local pedestrian network;*

- *Some parts of the towpath may be suitable for inclusion in an advisory cycle network. This will be accepted where widths are sufficient to prevent conflict with other users and where the requisite permits have been obtained. Such a network should be drafted to acknowledge that the access points are closed between dusk and dawn;*

- *Ramped access complying with the Council's standards for provision for people with disabilities should be provided at as many access points as possible;*

- *The design, materials and detailing of towpath access points, surfacing, signposting, seats, lavatories, etc. should respect the established character of the canalside. Historic and traditional features and artifacts such as bollards and paddle gear should be retained or incorporated in new landscaping wherever possible,*

Conservation of Existing Character

- *Many existing buildings near the canals are substantial and of some architectural quality, and in places provide the distinctive sense of enclosure characteristic of Britain's urban canalside network. They should be retained and refurbished wherever possible. To this end, proposals that make good use of canalside buildings no longer required for their original purpose will be considered favourably, provided they do not impair local amenity. Where the canal adjoins the parkland areas, proposals will be expected to take into account the change from those parts of the canal where planting is largely present as a foil for built structures, to those parts where planting is already dominant,*

- *Building materials used in canal walls, surfaces and adjoining buildings have become habitats for existing species The use of traditional materials will therefore be encouraged for the maintenance of species as well as to preserve the character of the built environment.*

Nature Conservation

- *Many parts of the canalside including soft landscapes features are of significant ecological value. Proposals will be expected to retain and protect these areas from undue disturbance while leaving permanent access for the management;*

- *The canals and their land margins are essentially wetland ecology. In order to retain its integrity and develop species richness, careful attention should be given to the species to be used in planting schemes The Tower Hamlets Canal Project, published by the London Wildlife Trust, is an excellent guide to appropriate species for nature conservation. The BWB Waterway Environmental Handbook is a good general guide which will be of use for landscape proposals for development and parks;*

- *Parts of the canals and the adjoining land margins will be managed as natural habitats where random colourisation will be permitted, or specific eco-systems will be created. The Council may seek land for the creation of maintenance of such reserves as a planning gain in association with developments.*

New Development

- *Most uses and types of activity are potentially suitable for the canalsides, provided that they do not impair local amenity and they comply with Plan policies. However, temporary uses adjacent to the canals will not usually be permitted, as such uses are generally unable to provide the level of investment necessary to sustain development of a sufficient standard;*

- *Inherently, unattractive canalside uses such as car parking or certain sorts of open storage should be avoided wherever possible, or failing this be screened by a high fence and adequate planting, or by a high brick wall,*

- *All development should take advantage of canalside locations in terms of outlook and orientation and should complement the canalside in terms of the aspect it presents to the canal;*

- *Where the character of adjacent development suggests that it would be appropriate, new development should provide the sense of enclosure characteristic of much of the canalside. Elsewhere suitable landscaping and tree planting will be required as part of new development adjacent to the canal;*

- *New development should, wherever possible, provide sitting-out areas, terraces, or gardens overlooking the canal;*

- *The design of new development should provide for access for the maintenance of areas visible from the canal, the design of both hard and soft canalside landscaping should be durable, requiring the minimum maintenance and being vandal proof;*

- *Where open space adjoins the canal, measures should be taken to ensure a good relationship between the open space and the canalside by keeping fencing to a minimum and by avoiding high embankments at the canal edge;*

- *In order to ensure that neglected and unsightly strips of land neither remain nor are created between new developments and the canalside, development adjoining the canal will not be permitted unless the development site includes all land up to and including the canal bank or towpath. In order to eliminate areas of unmaintained land and create an integrated approach to the management of the canalside environment, management agreements may be required to ensure that parcels of potentially neglected land are treated in conjunction with adjoining development;*

- *Wherever possible fencing should be avoided at or near the canal edge, but where it is considered necessary for safety purposes then a low (less than 1.375m, preferably about 0.9m high) vertical iron or mild steel railing is considered most appropriate in most circumstances, this type of fencing visually desirable, but it also allows a rescuer to get to the canal edge should require help;*

- *Proposals for launching facilities, moorings, marinas, and places of canalside entertainment such as restaurants, cafes, pubs and wine-bars will usually be welcomed. However, local amenity factors such as access considerations, vehicle and pedestrian flows, car parking and the like, as well as British Waterways Board operational limitations and requirements must also be taken into account in assessing the suitability of any applications;*

- *The Council considers that advertisement hoardings are, by virtue of their scale and appearance, generally unsuited to a canalside setting. Accordingly, the Council will not usually give permission for the erection of new hoardings, which it may make use of its powers to secure the removal of advertisement displays where it considers them to impair local amenity. Provided they comply with Planning Guideline No.1., well-designed signs associated with canalside recreational and commercial entertainment facilities will, however, usually be permitted;*

Detailed Design Guidance

- *The Council will use the relevant design standards contained in the London Canals Committee Development Control Guidelines (January 1992) in assessing the suitability of any canalside development proposals. It will also take into account the British Waterways Board's Waterway Environmental Handbook 1972 (with amendments and additions), and the safety guidelines recommended by the Inland Waterways Amenity Advisory Council (Report 96).*

- *In order to pursue the Council's policy of canalside improvement, any of the following procedures may be followed :*

1. *Conditions on planning permissions;*
2. *Use of planning and other legal agreements;*
3. *Enforcement procedure wherever a user has ignored or failed to meet the conditions of a permission;*
4. *Negotiation with individual firms and landowners to encourage them to tidy up their sites;*
5. *Where negotiation is unsuccessful, use of Section 65 of the 1971 Town & Country Planning Act to deal with unsightly sites.*

Liaison

- *In order to maintain and improve the quality of the canals and their environs in Tower Hamlets, the Council will continue to liaise closely with British Waterways Board, the Lee Valley Regional Park Authority, the Thames Water Authority, the London Canals Committee and the Inland Waterways Amenity Advisory Council.*

London Borough of Waltham Forest

Unitary Development Plan (UDP) – 1996

Designations

In Waltham Forest the River Lee Navigation has been classified as :

- *Archaeological Priority Zone,*
- *Green Chain,*
- *Metropolitan Green Belt;*
- *Metropolitan Open Land;*
- *Principle Site of Nature Conservation Importance*

In addition to these the River Lee Navigation falls within the Lee Valley Regional Park and lies adjacent to Chingford Reservoirs site of Special Scientific Interest.

Strategic Policies

The Environment

- *SP1 – The Council will seek to maintain and enhance the natural and built environment of the Borough. In particular it will :*

1. *Ensure that new developments or changes of use enhance rather than detract from their surroundings;*
2. *Promote the improvement of the urban environment of the Borough particularly in the environmental priority area;*
3 *Conserve and enhance areas and buildings of special townscape value or of historic and architectural interest;*
4 *Continue to protect the Green Belt and Metropolitan Open Land from incompatible development;*
5. *Conserve and enhance open spaces within the urban area which have an important role to play whether for amenity reasons, for nature conservation, or for recreation and community purposes;*
6 *Protect and enhance Green Chains.*

Transport

- *SP3 – The Council will promote an integrated transport network which encourages modes of travel and means of carrying freight which case least damage to the environment and benefit the whole community.*

Leisure and Recreation

- *SP14 – The Council will seek to retain existing sites in leisure and recreational use. The Council will also seek to maximise the use of existing facilities for the benefit of all sections of the community. New facilities will generally be welcomed.*

Policies

Environment

- ***ENV21 – Archaeology :***

The Council will seek to encourage the conservation, protection and enhancement of the archaeological heritage of the Borough.

When any development involving a site of 0.4 of an acre or more is proposed within the archaeological priority zones (as shown on the UDP proposals map), or for any site identified by a recognised archaeological authority, the archaeological significance of the site will be considered. Where appropriate, the Council may require a preliminary archaeological site evaluation before development proposals are considered.

The Council will seek to ensure that the most important archaeological remains and their settings are permanently preserved, if necessary for public access and display.

Sites of archaeological significance or potential not requiring permanent preservation shall have provision made for an appropriate level of archaeological investigation and excavation to be undertaken by a recognised archaeological organisation before and during the process of development. Such provision shall also include the subsequent analysis, interpretation and in appropriate cases, presentation to the public of the archaeological results and finds.

- ***ENV22 – The Local Heritage :***

The Council will endeavour to promote an increased awareness of the local heritage by means of .

1. *The identification and signing of buildings and sites of historic interest;*
2. *The linking of buildings and sites of historic interest by town trails,*
3. *The creation and improvement of sign-posted pedestrian routes.*

- ***ENV24 – Development within the Metropolitan Green Belt :***

Within the Metropolitan Green Belt approval will only be given for the construction of new buildings or for the change of use of existing buildings for purposes related to agriculture and forestry, outdoor sport and recreation, cemeteries or other uses appropriate to the open nature and character of the Green Belt. Approval for other buildings and uses will only be granted if there are very special circumstances;

- ***ENV25 – Uses within Metropolitan Open Land :***

Within the areas of Metropolitan Open Land the following are the only uses which will generally be permitted:

1. *Public and private open space and playing fields;*
2 *Open-air recreational facilities;*
3 *Woodland and informal open space;*
4. *Allotments and nursery gardens,*
5 *Nature Conservation*

- ***ENV26 – Development in Metropolitan Open Land :***

The Council will seek to maintain the open character of metropolitan open land in a form appropriate to each area Built

development will not normally be permitted except where it is ancillary to or in association with the uses specified in Policy ENV25. It will be controlled in line with the following criteria:

1. *New buildings should be limited in scale, be carefully sited in relation to any existing built development on the site, and be close to the periphery; and*
2. *A high standard of landscaping and design will be required so as to enhance the open setting;*

- ***ENV28 – Principal Site of Nature Conservation Importance :***

  The principal sites of Nature Conservation Importance will be protected, any developments proposed on principal sites of Nature Conservation Importance, or on land next to or near such sites, which will have a significant detrimental effect on their nature conservation interests will not be permitted;

- ***ENV31 – Facilities for Visitors :***

  Where appropriate, the Council will seek to improve facilities for visitors at the sites of nature conservation importance. Access will be restricted where the conservation of nature may be adversely affected by disturbance.

- ***ENV32 – Conservation of Green Chains :***

  The Council will resist development which endangers the integrity of Green Chains, and will promote the conservation and enhancement of such features;

- ***ENV34 – Areas at risk from Flooding :***

  In the areas at risk from flooding the Council will need to be satisfied that development proposals would not result in an unacceptable increase in the risk of flooding to people and property. In assessing this risk the Council will consult the Environment Agency

  Where appropriate, the Council will require flood protection measure to be included in development proposals These will be defined by the Council in consultation with the Environment Agency;

- ***ENV35 – Surface Water Run-off :***

  The Council will consult the Environment Agency (EA) and adjacent Boroughs to assess the impact of any proposals which appear likely to result in an increased flood risk in areas downstream due to additional surface water run off. Where development is permitted which is likely to increase the risk of flooding, the Council will impose conditions requiring appropriate attenuation measures;

- ***ENV36 – Works Affecting Watercourses :***

  The Council, in consultation with the Environment Agency, will seek to ensure that all works in, under, over and adjacent to watercourses are appropriately designed and implemented;

- ***ENV37 – The Water Environment :***

  Development should not have an adverse effect on the water environment. In particular, the Council will :

1. *Resist the infilling of open water and wetland areas and the culverting of water courses*
2. *Seek to ensure that any improvement or management of water bodies should take account of the needs of nature conservation;*

Transport

- ***TSP1 – Pedestrians :***

  In order to maintain, and wherever possible improve the environment for pedestrians and wheelchair users, the Council will :

1. *Generally oppose any proposals which would result in the loss of any footpath or footway, or which would cause a deterioration in the environment for pedestrians;*
2. *Seek to maintain, and wherever possible improve the footpaths, footways, pavements and pedestrian areas in the Borough, and other facilities such as verges, street furniture, and street lighting which affect the environment for pedestrians;*
3. *Pedestrianise major shopping streets where possible and practicable;*
4. *Identify areas with high levels of pedestrian activity in which resources and attention can be focused;*
5. *Improve pedestrian links to public transport facilities;*

- ***TSP2 – Cycling :***

  In order to promote cycling as a healthy and efficient form of transport, the Council will :

1. *Support the provision of primary cycle routes in the Borough as part of a strategic cycle network for London;*
2. *Provide safe local cycle routes and lanes where possible;*
3. *Seek provision of secure cycle parking facilities at public transport interchanges, shopping centres, and adjacent to public buildings where space is available;*
4. *Seek to ensure that, where appropriate, proposals for which planning permission are required make adequate provision for cycle access and parking;*
5. *Improve security for cyclists;*
6. *Improve cycling links to public transport facilities;*
7. *Take account of the needs of cyclists in the design of all new roads, highway improvements, and traffic management measures, and ensure that works are completed to a high standard.*

- ***TSP10 – Minimising Damage by Heavy Goods Vehicles :***

  In order to minimise the environmental damage caused by heavy goods vehicles, the Council will :

1. *Seek to ensure that developments which generate heavy goods traffic are located where adequate access is available. Such developments should make adequate provision for off-street loading, unloading, and lorry parking;*
2. *Seek to protect environmentally sensitive areas from the adverse environmental effects of lorries;*
3. *Control night-time on-street lorry parking and provide adequate off-street lorry parking with appropriate charges to enable the control to operate successfully;*
4. *Support the control of night-time and weekend lorry movements in London;*
5. *Encourage the movement of as much freight as possible by rail and waterway.*

Leisure and Recreation

- ***LAR1 – Protection of all Recreational Space :***

Proposals which would result in the loss of any recreational open space, or the loss of any land where recreational open space was the last authorised use, will be resisted save in very exceptional circumstances. Such exceptional circumstances are unlikely to arise unless an equivalent or better recreational facility is provided elsewhere within the Borough. If the proposal is within an area of open space deficiency, a facility which is of at least equal size and quality which serves the same catchment areas should provided,

- ***LAR2 – Retention of Parks :***

  The Council seeks to retain all the parks within the Borough Proposals for change of use or for built development at these locations will be refused, except where the development is ancillary to, or complements recreational open space use Any such built development should be so designed and sited as to maintain the open aspect of the park and enhance its park setting.

- ***LAR3 - Improvement of Parks :***

  The Council will seek to improve the quality and variety of the Borough's parks by :

1. *Enhancing facilities to meet the needs of both existing and potential users;*
2. *Providing high quality landscape environments,*
3. *Wherever possible, making better use of existing facilities,*

- ***LAR8 – Lee Valley Park :***

  The Council supports the Lee Valley Regional Park Authority (LVRPA) in its efforts to increase the range of quality of leisure and amenity provision available to Waltham Forest residents, subject to their general compliance with the policies of this plan. Specifically the LVRPA propose, and the Council supports:

1. *Measures to improve access both to and within the park for those who do not have private transport,*
2. *The development of the water areas in the Lea Valley for the recreation and nature conservation;*
3. *The development of a footpath network throughout the park, incorporating a path which extends along the length of the Lea Valley;*
4. *Measures to maintain and enhance the quality of the environment.*

- ***LAR9 – Water-based Recreation :***

  The Council will generally encourage the development of facilities for water-based recreation, provided there is no conflict with nature conservation and environmental considerations;

- ***LAR10 – Walking :***

  In order to encourage walking as a recreational activity, the Council will maintain, and wherever possible improve the Borough's footpaths and walkways Where appropriate, it will also seek to create new footpaths and walkways to and through open spaces and places of interest;

- ***LAR16 – Access to Leisure Facilities :***

  The Council will seek to ensure that all existing and proposed leisure facilities in the Borough are accessible to all members of the community. In particular, the requirements, the elderly and people with young children should be fully taken into account;

PUBLIC
CONSULTATION

THE POTENTIAL FOR THE LOCAL COMMUNITY - BOTH RESIDENTIAL AND BUSINESS - TO BE CLOSELY INVOLVED IN THE FUTURE OF THE RIVER CORRIDOR

ANGLERS

BOATERS

CHILDREN & YOUNG PEOPLE

CYCLISTS

PEDESTRIANS

RESIDENTS

VISITORS

WORKERS

VISION

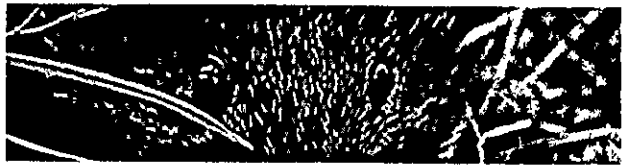
INTRODUCTION

Groundwork Hackney and the Lower Lea Project have been involved in carrying out public consultation on behalf of British Waterways, to ensure that all people who use the River Lee Navigation corridor have had a chance to contribute to the development of this Action Plan. They carried out a wide range of public events, which included guided walks, cycle rides, community boat trips, work with schools and youth clubs, local residents, local businesses and waterway users.

The following summary of the feedback from the River Lee Navigation corridor users has been prepared by Groundwork Hackney and the Lower Lea Project, and forms part of their input into this Action Plan. For the full feedback as compiled by Groundwork Hackney and the Lower Lea Project, see the Appendix, Section 10

ACCESS WITHIN THE HACKNEY WICK WATERWAY

BUSINESS ACTIVITY & PREMISES



ENVIRONMENTAL QUALITY

WATERWAY USE

OTHER AMENITIES

ACCESS WITHIN THE HACKNEY WICK WATERWAY

The main access route through the Hackney Wick Waterway is the towpath on the east bank of the Lee Navigation (Hackney Cut), which is supplemented by a path which runs along the west bank of the Old River Lea, and which is shortly to be incorporated into the Sustrans National Cycle Network. The Marshes themselves provide opportunities for open walking and various recreational activities.

Towpath Access Barriers

More so than any other stretch of the Lee or the Regent's Canal, cross path barriers are a significant feature of the area, with 8 structures currently in use and one further structure in disrepair.

The purpose of these barriers is viewed as the prevention of motorcycles from entering the towpath. The effectiveness of these structures has been called into question by respondents who felt that:

- Motorcycle 'joyriders' don't really care if the motorcycle gets damaged as they negotiate barriers, and can still force their way through;
- The Water Bailiff uses a moped, and regularly negotiates the whole length without difficult.

Whilst barriers were seen to be of some use, it was felt that the current deployment caused significant disadvantage to other users – cyclists, wheelchair users, those with buggies, cycle trailers etc – and were in effect excluding legitimate users and therefore *increasing* opportunity and likelihood of criminal or antisocial activities occurring.

Towpath Surfaces

Most of the path surface is loose gravel, with granite setts under bridges It was noted that these surfaces caused:

- Significant puddling on the paths during even light rain;
- Danger of skids and slipping (particularly for cyclists) on the granite surfacing beneath bridges – especially when wet

Both of the previous concerns pose significant obstacles for wheelchair users which, along with the barriers described before, are enough to render the area 'functionally inaccessible'

Vulnerable Areas

Described as 'dodgy areas' by several respondents, these tended to affect cyclists more than other users who feared personal attack and cycle theft whilst negotiating barriers – particularly under the M11.

More generally, respondents felt that they would be more at ease with a higher level of waterside activity, most significantly, waterway businesses having a river frontage.

Transport Links

The majority of respondents were local pedestrians or cyclists, and had no clear idea of how the area could be easily accessed from further afield Considering the public transport options locally available, this comes as no surprise.

BUSINESS ACTIVITY & PREMISES

Waterway businesses were perceived generally as dirty and unsightly, and of little value to the local economy. Singled out for particular criticism were:

- Lesney Industries on Homerton Road;
- The Old Power Station / LBH Waste Transfer Site at Millfields;
- The New Spitalfields Market which borders the Old River Lea from Waltham Forest,
- The Princess of Wales Public House on Lea Bridge Road

In terms of local regeneration, respondents wished to see better managed and more attractive business boundaries, new businesses focusing on leisure services, including Restaurants, cafés, sports and conservation. A key feature was seen as employment generation, but not at the expense of the local environment.

ENVIRONMENTAL QUALITY

Widespread concern was noted regarding the following.

- Litter,
- Floating Debris,
- Invasive aquatic species,
- Graffiti,
- Waterway Pollution;
- Management of waterway vegetation;
- Management and repair of fences / railings etc.

Respondents supported protection of existing habitats, and the creation of further protected areas. Particularly respondents favoured the 'naturalising' of the banks on the Hackney Cut, to increase the presence of kingfishers etc.

Public River Clean up volunteer days were seen as popular and effective, as well as provision of waterway related environmental education for young people More litter bins were called for, although LVRPA, as current policy, do not provide litter bins, but rely instead on contracted litter pickers.

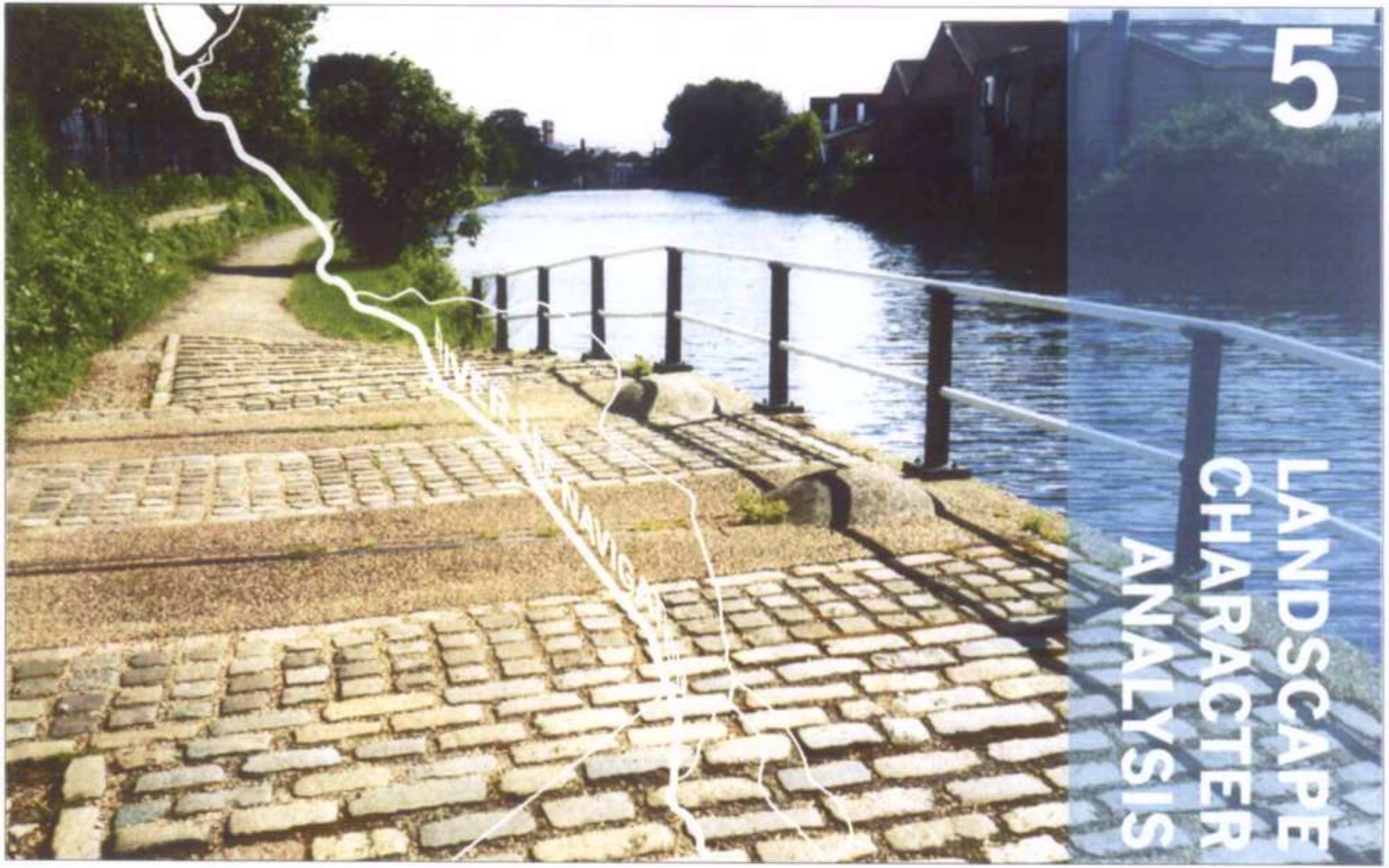
WATERWAY USE

Those who use the navigation for rowing or canoeing were largely happy with the current situation, but were concerned about waterborne pollution. Users of larger craft, whilst generally happy, were concerned about the depth of the navigation in parts, and about floating debris. Narrow boat users favoured more sites for mooring, particularly secure overnight moorings on the Hackney Cut.

OTHER AMENITIES

All groups of respondents were in favour improving or initiating the following:

- Public toilets;
- Cafés;
- Restaurants,
- Improved / new riverside pubs,
- Cycle hire facilities;
- More riverboat trips;
- Bridge names and improved signage;
- Boat hire,
- Public art.



5 LANDSCAPE CHARACTER ANALYSIS

THE WATERWAY LANDSCAPE: A SUMMARY

The River Lee Navigation throughout its length is very much an oasis of calm away from the busy pressures of the surrounding urban environment. The River Lee Navigation forms the backbone of the Lee Valley Regional Park whose overall character is dominated by water. Throughout the length of this small study there are the linear waters of the River Lea, River Lee Navigation, various smaller rivers/streams and ditches which cover Walthamstow Nature Reserve. Also there are a few ponds and the operational Warwick West Reservoir supplying London's drinking water.

Alongside much of the navigation many wide open spaces can be accessed, especially on the eastern side These include Hackney Marsh, Leyton Marsh, Springfield Park and Walthamstow Marsh Nature Reserve All of these along with many smaller recreation grounds adjacent to the navigation, contribute to the quiet and secluded character of the waterway environment Unfortunately though, this very quiet and secluded character can appear threatening to some users. The lack of activity along stretches of the navigation leads to a perceived fear of crime by its users

The historic industrial context of the navigation is very apparent throughout with many old warehouses backing onto the canal along with the now redundant old CEGB power station site. Dotted along the navigation are remnants from its industrial past as a major freight transport facility, including bollards, disused railway lines, a filled in basin/wharf and a pair of stopgates. All these are part and parcel in the character of the River Lee Navigation, but once again a perceived fear of crime is felt by the navigations users amongst these historic industrial areas. This time it is not the openness of the navigation corridor that is the problem, it is the opposite, it is the enclosure and especially the lack of surveillance caused by the industrial units backing into the waterway.

Through these differing landscapes, the navigation itself forms the unifying element within the Lee Valley, linking all the diverse land uses. It creates a continuous wildlife corridor along the valley and provides the only continuous route by foot, cycle and boat through the Lee Valley Park The navigation corridor is a big component of the Lee Valley Green Chain.

Much of the local recreational and leisure facilities are focused around the navigation. These include Lea Rowing Club, Spring Hill Sports Ground, Leeside Young Mariners Youth Centre and of course Hackney Marsh Playing Fields Even with this being the case, activity along the navigation corridor is sparse. There is though the potential for a much wider range of recreational, sporting and leisure activities not only on the waterway but also on sites adjacent to the water.

Overall this stretch of the river Lee Navigation is very much an undiscovered/underused attractive and peaceful oasis enclosed in parts by industry and housing and open in other parts to the wide picturesque settings of Hackney, Leyton and Walthamstow Marshes It provides an insight and views to an industrial (warehouse) and medieval (Marshes) era gone by Unfortunately its contrasting senses of enclosure and openness have led to a perceived fear of crime by its users. There is no reason why, that with careful design and management this stretch of the River Lee Navigation can not become a true oasis in the city, with people wanting to visit and use it

CHARACTER AREAS

ZONE ONE – Springhill Sports Ground to Horse Shoe Bridge

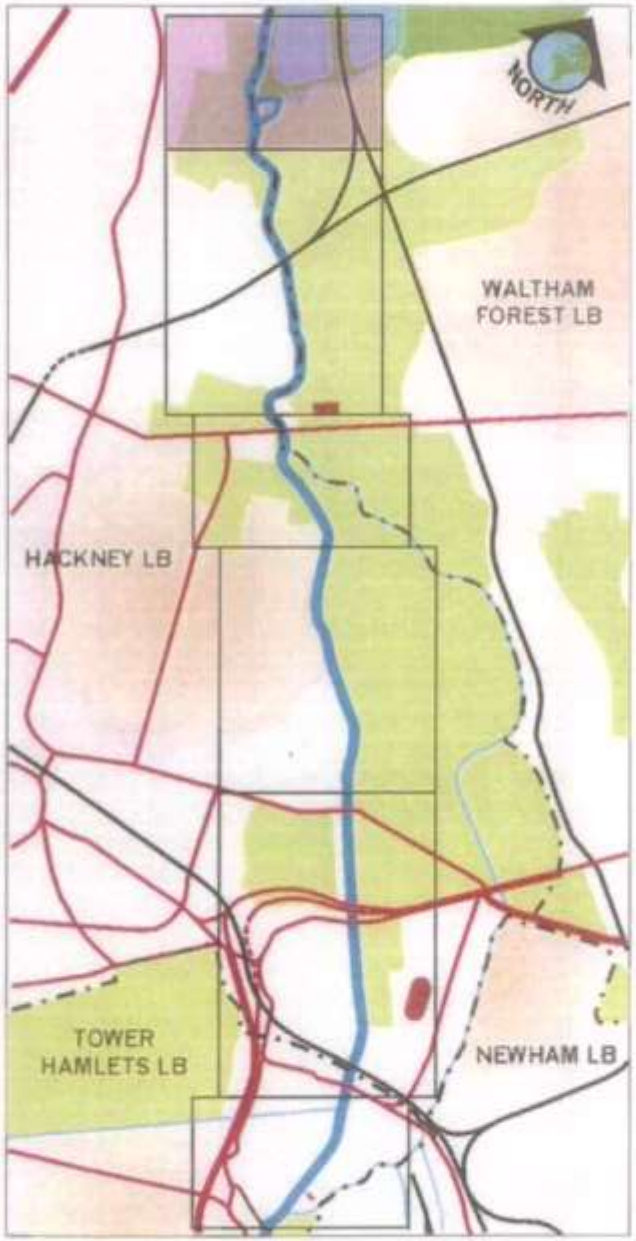
ZONE TWO – Horse Shoe Bridge to Middlesex Wharf Footbridge

ZONE THREE – Middlesex Wharf Footbridge to Cow Bridge

ZONE FOUR – Cow Bridge to Marshgate Bridge

ZONE FIVE – Marshgate Bridge to Carpenter's Road Bridge

ZONE SIX – Carpenter's Road Bridge to Old Ford Locks



CHARACTER DESCRIPTION

Open, pleasant stretch of canal with the open expanse of Springfield Park on the nearside and the prominent feature of Springfield Marina on the offside which winds round Horse Shoe Island. Coppermill Stream feeds into the River Lee Navigation from Springfield Marina. North of High Bridge Footbridge on the offside, is the vast expanse of Warwick Reservoir West which runs unnoticed alongside the navigation, apart from its give away engineered grass embankment. Opposite this, on the nearside, many locals can be found at the slightly dilapidated Springfield Café or out on the navigation using the facilities of Lea Rowing Club. Just south of Springfield Marina Horse Shoe Bridge takes the towpath across the navigation to Walthamstow Marsh Nature Reserve.

ADJACENT LAND USE

- Amenity / leisure.

VIEWS / VISUAL LINKAGES

- Springfield Marina.
- Springfield Park.
- Into the corridor from Horse Shoe Bridge.

RECREATION / COMMUNITY LINKAGES

- Access from:
  - High Bridge via a stepped ramp.
  - Horse Shoe Bridge.
  - Spring Hill Road.
  - Spring Lane.
- Lea Rowing Club
- Sea Scouts.
- Spring Hill Sports Ground
- Springfield Café
- Springfield Marina
- Springfield Park
- Walthamstow Marsh Nature Reserve

STRENGTHS / ATTRIBUTES

- Lea Rowing Club.
- Spring Hill Sports Ground.
- Springfield Café.
- Springfield Marina.
- Springfield Park.
- Walthamstow Marsh Nature Reserve.

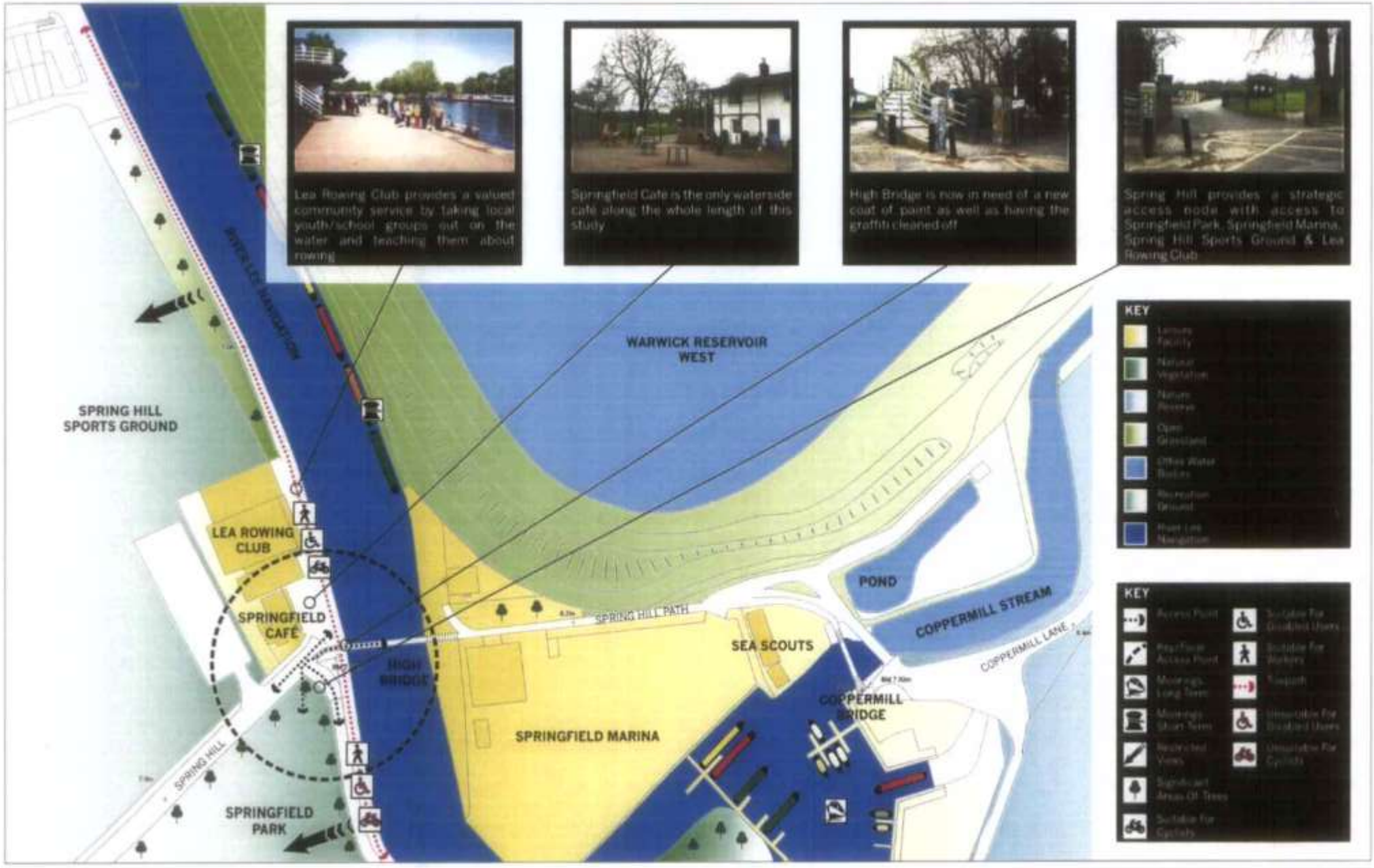
WEAKNESSES

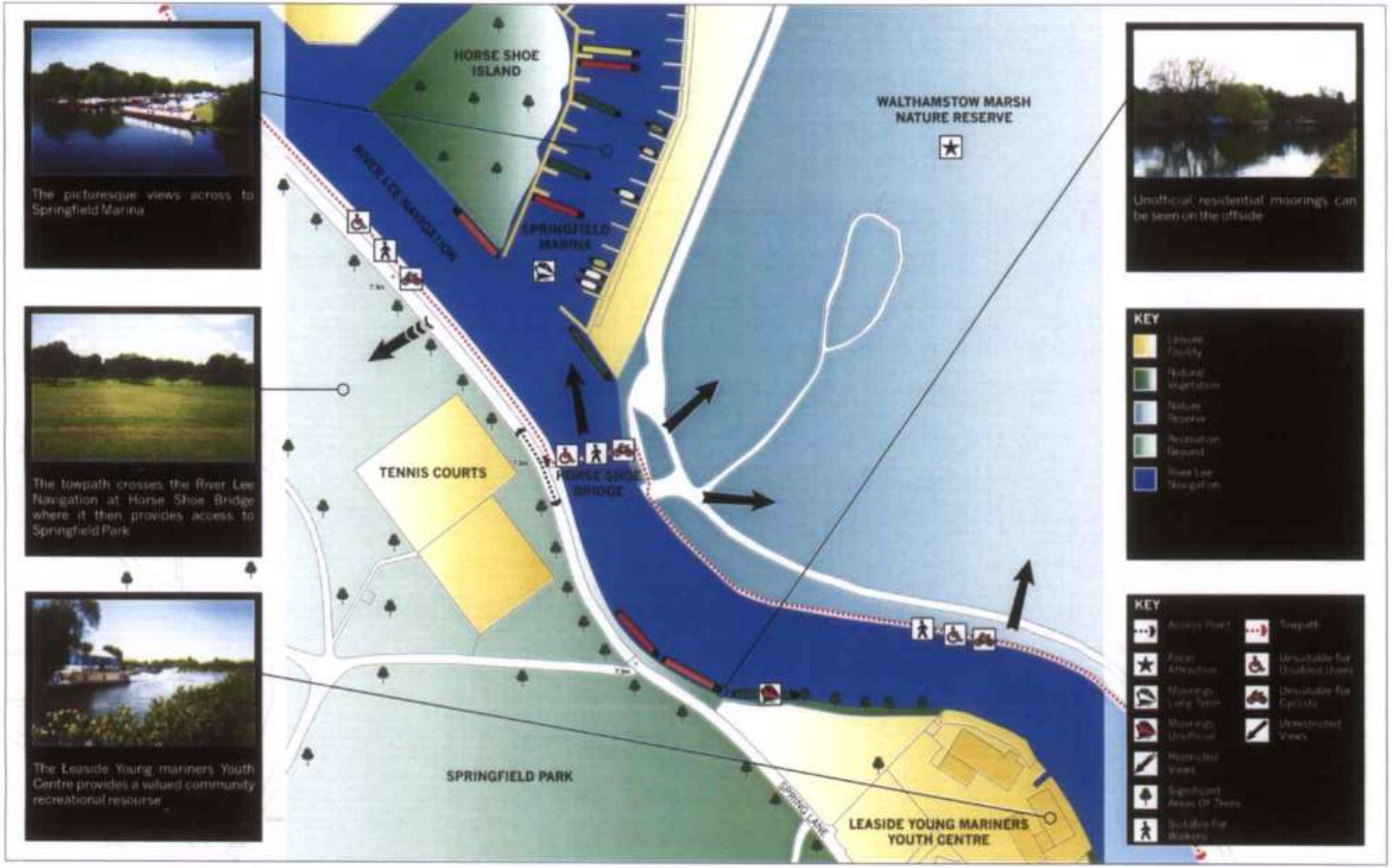
- Disrepair of Springfield Café.

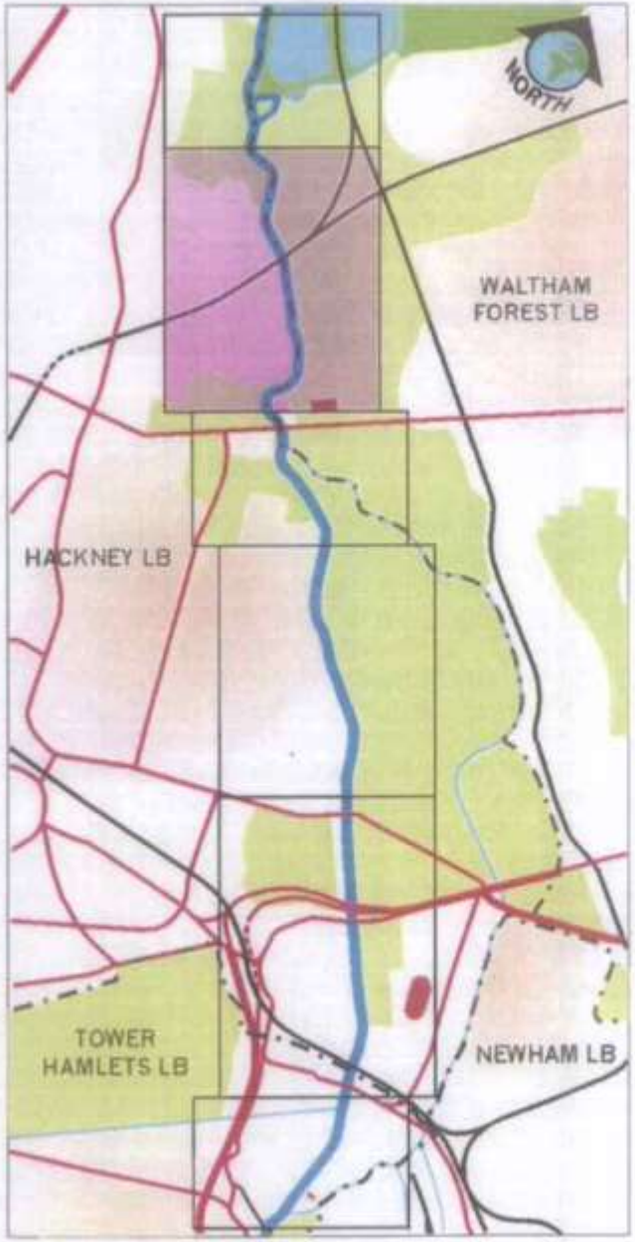
OPPORTUNITIES

- Improved access and linkages.
- Improved facilities at Spring Hill Sports Ground.

THREATS


Lea Rowing Club provides a valued community service by taking local youth/school groups out on the water and teaching them about rowing
Springfield Cafe is the only waterside cafe along the whole length of this study
High Bridge is now in need of a new coat of paint as well as having the graffiti cleaned off
Spring Hill provides a strategic access node with access to Springfield Park, Springfield Marina, Spring Hill Sports Ground & Lea Rowing Club
WARWICK RESERVOIR WEST
SPRING HILL SPORTS GROUND
LEA ROWING CLUB
SPRINGFIELD CAFE
HIGH BRIDGE
SPRING HILL PATH
SEA SCOUTS
POND
COPPERMILL STREAM
COPPERMILL LANE
COPPERMILL BRIDGE
SPRINGFIELD MARINA
SPRING HILL
SPRINGFIELD PARK
KEY
KEY


The picturesque views across to Springfield Marina
HORSE SHOE ISLAND
WALTHAMSTOW MARSH NATURE RESERVE
SPRINGFIELD MARINA
Unofficial residential moorings can be seen on the offside
KEY
The towpath crosses the River Lee Navigation at Horse Shoe Bridge where it then provides access to Springfield Park
TENNIS COURTS
HORSE SHOE BRIDGE
KEY
The Leaside Young mariners Youth Centre provides a valued community recreational resourse
SPRINGFIELD PARK
LEASIDE YOUNG MARINERS YOUTH CENTRE



CHARACTER DESCRIPTION

Generally open, picturesque stretch of canal with the wide open expanse of Walthamstow Marsh Nature Reserve on the nearside, which is unfortunately bisected by Clapton Junction Viaduct and railway line. South of the Nature Reserve, also on the nearside is Leyton Marsh Recreation Ground. The overall feel of being totally out of the urban sprawl of London is only diminished by the industry and housing seen on the offside. In the height of summer, the towpath is engulfed along this stretch by vegetation, which adds to its natural feel. Activity on the navigation is quite high along this stretch with canoeists coming out from Leaside Young Mariners' Youth Centre on the offside.

ADJACENT LAND USE

- Amenity / leisure.
- Industry.
- Residential.

VIEWS / VISUAL LINKAGES

- Leaside Young Mariners' Youth Centre.
- Walthamstow Marsh Nature Reserve.
- Into the corridor from Horse Shoe Bridge and Middlesex Wharf Footbridge.

RECREATION / COMMUNITY LINKAGES

- Access from:
  - Horse Shoe Bridge via a ramp.
  - Middlesex Wharf Footbridge via a ramp.
- Leaside Young Mariners' Youth Centre.
- Lee Valley Ice Centre.
- Leyton Marsh.
- Springfield Marina.
- Springfield Park.
- Walthamstow Marsh Nature Reserve.

STRENGTHS / ATTRIBUTES

- Leaside Young Mariners' Youth Centre.
- Lee Valley Ice Centre.
- Leyton Marsh.
- Springfield Marina.
- Springfield Park.
- Walthamstow Marsh Nature Reserve.

WEAKNESSES

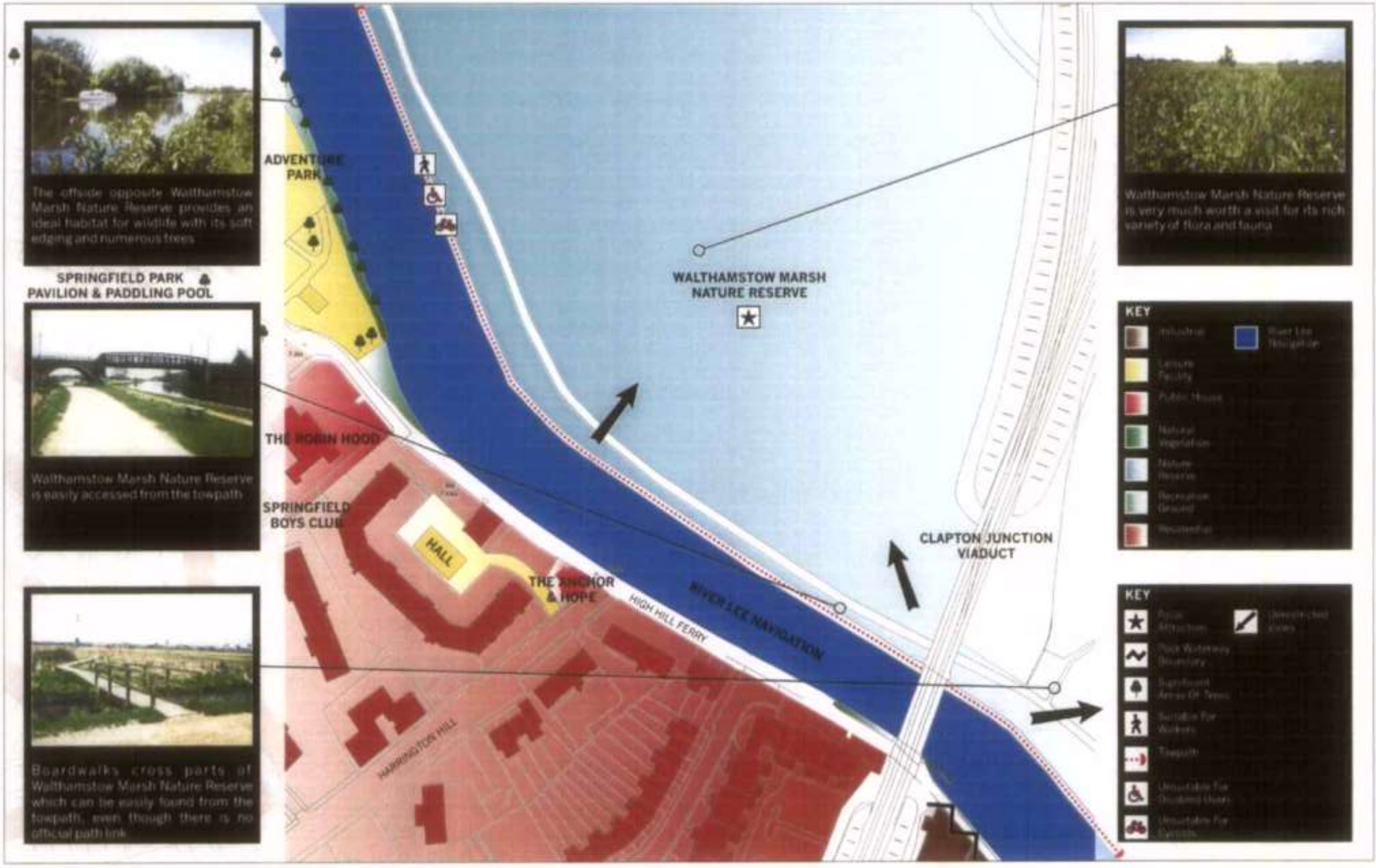
- Towpath width.
- Industry backing onto waterway.

OPPORTUNITIES

- Better integration with Walthamstow Marsh Nature Reserve.

THREATS

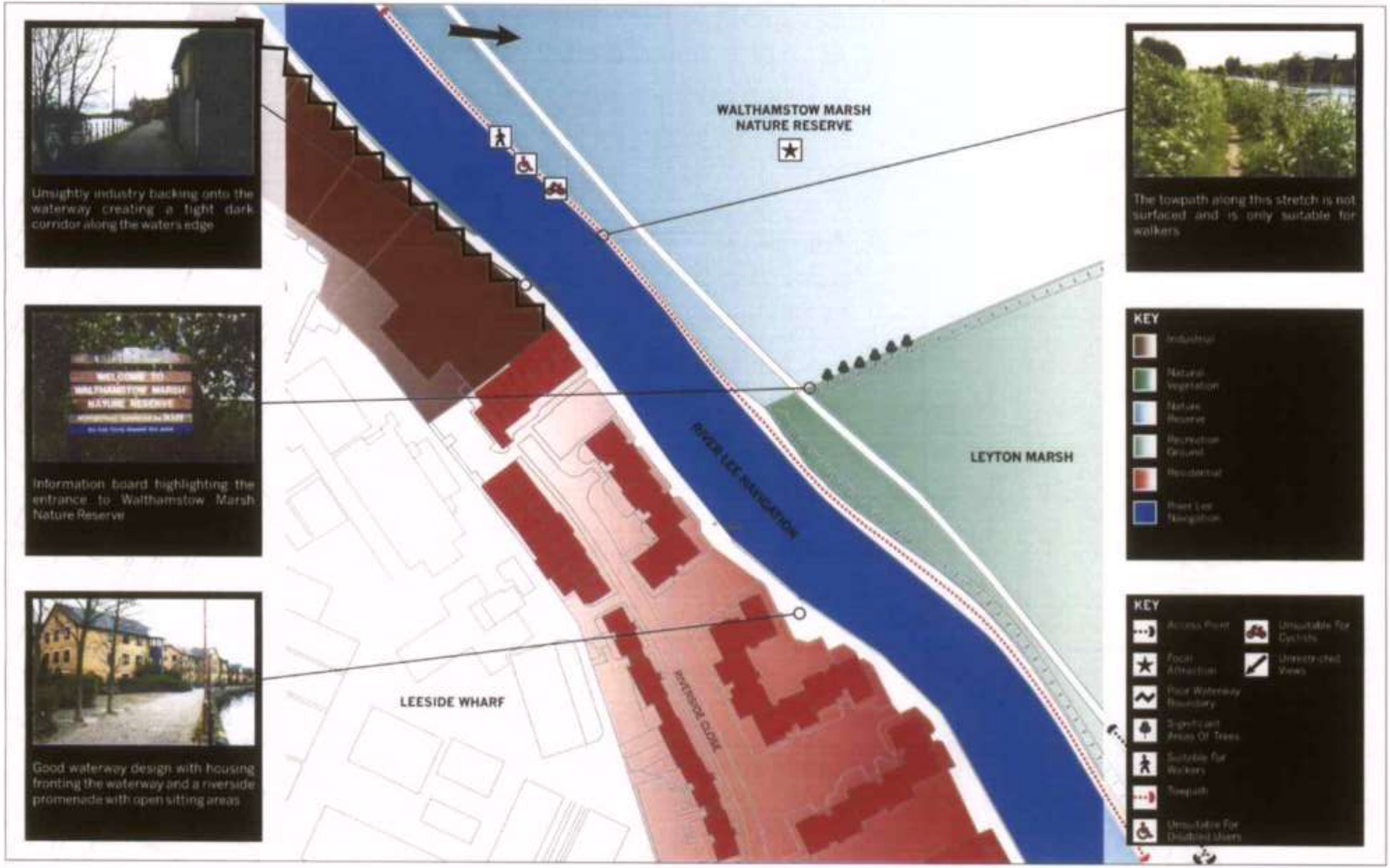
- Lack of maintenance of towpath.


The offside opposite Walthamstow Marsh Nature Reserve provides an ideal habitat for wildlife with its soft edging and numerous trees
ADVENTURE PARK
SPRINGFIELD PARK PAVILION & PADDLING POOL
Walthamstow Marsh Nature Reserve is easily accessed from the towpath
THE ROBIN HOOD
SPRINGFIELD BOYS CLUB
HALL
THE ANCHOR & HOPE
HIGH HILL FERRY
RIVER LEE NAVIGATION
HARRINGTON HILL
Boardwalks cross parts of Walthamstow Marsh Nature Reserve which can be easily found from the towpath, even though there is no official path link
WALTHAMSTOW MARSH NATURE RESERVE
CLAPTON JUNCTION VIADUCT
Walthamstow Marsh Nature Reserve is very much worth a visit for its rich variety of flora and fauna
KEY
KEY

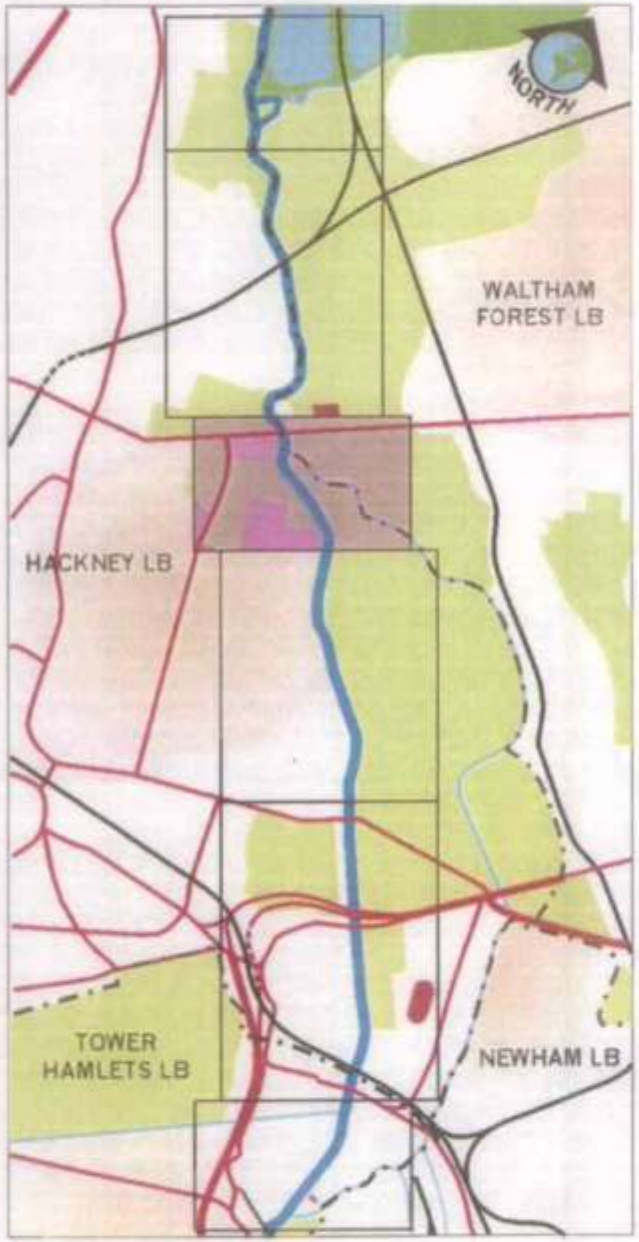
Unsightly industry backing onto the waterway creating a tight dark corridor along the waters edge

Information board highlighting the entrance to Walthamstow Marsh Nature Reserve

Good waterway design with housing fronting the waterway and a riverside promenade with open sitting areas



The towpath along this stretch is not surfaced and is only suitable for walkers



CHARACTER DESCRIPTION

Generally enclosed but still pleasant stretch of the canal only blighted by the council depot and Paver Station on the offside directly north of Cow Bridge. The nearside is enclosed by scrub hiding the car park to the Hackney Marsh changing rooms and then the stone wall surrounding the Middlesex Filter Beds Nature Reserve before opening up at the junction between the River Lee Navigation and River Lea or Lee. Lea Bridge Park opens up the views on the offside.

ADJACENT LAND USE

- Amenity/leisure.
- Industrial.

VIEWS/VISUAL LINKAGES

- Power station.
- Pylons.
- Sluice house and sluice gates.
- Into the corridor from Cow Bridge and Lea Bridge.

RECREATION/COMMUNITY LINKAGES

- Access from:
  - Cow Bridge via a ramp.
  - Hackney Marsh changing rooms car park.
  - Middlesex Filter Beds Nature Reserve.
  - South Millfields Recreation Ground.
  - Lea Bridge via a ramp or steps.
- Hackney Marsh Recreation Grounds.
- Middlesex Filter Beds Nature Reserve.
- South Millfields Recreation Ground.
- Princess of Wales Public House.

STRENGTHS/ATTRIBUTES

- Hackney Marsh Recreation Grounds.
- Middlesex Filter Beds Nature Reserve.
- Sluice gates and house.
- Junction of the River Lee Navigation and River Lea or Lee.
- South Millfields Recreation Ground.

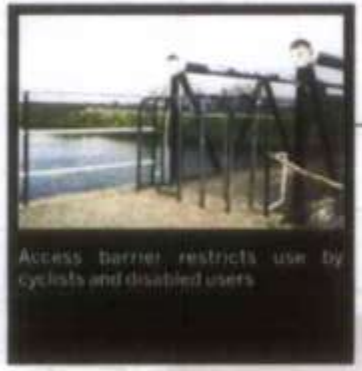
WEAKNESSES

- Council depot / Former CEGB Power Station.
- Power station.
- Conduit bridge.

OPPORTUNITIES

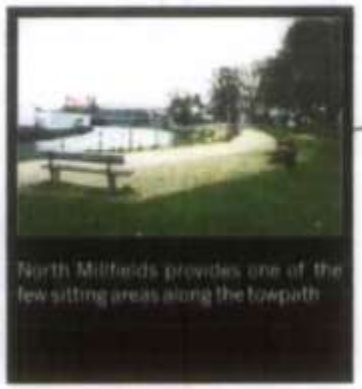
- Improve on access and linkages.
- Screening of the council depot / development of site.
- Moorings on the offside.

THREATS

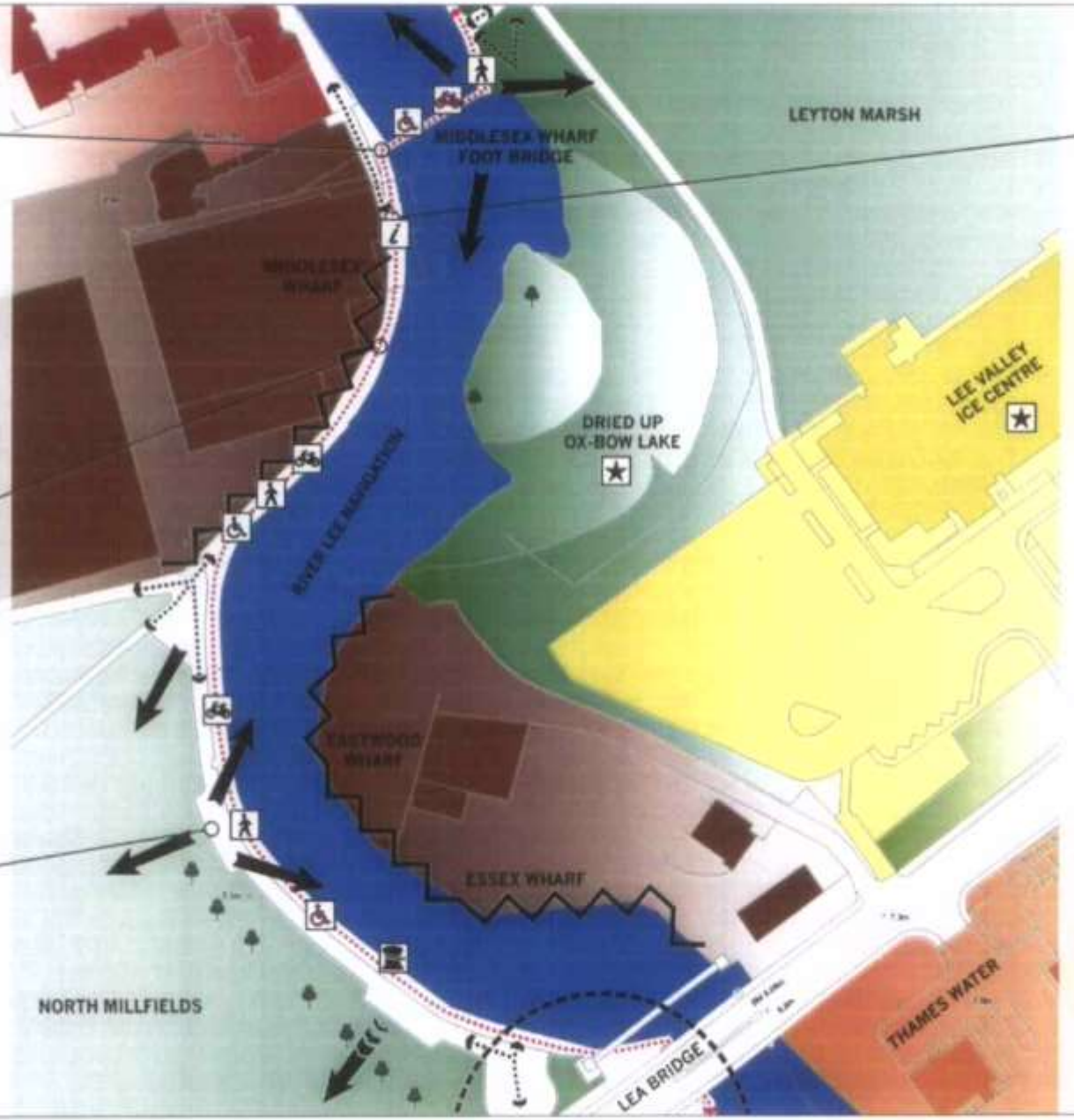


Access barrier restricts use by cyclists and disabled users

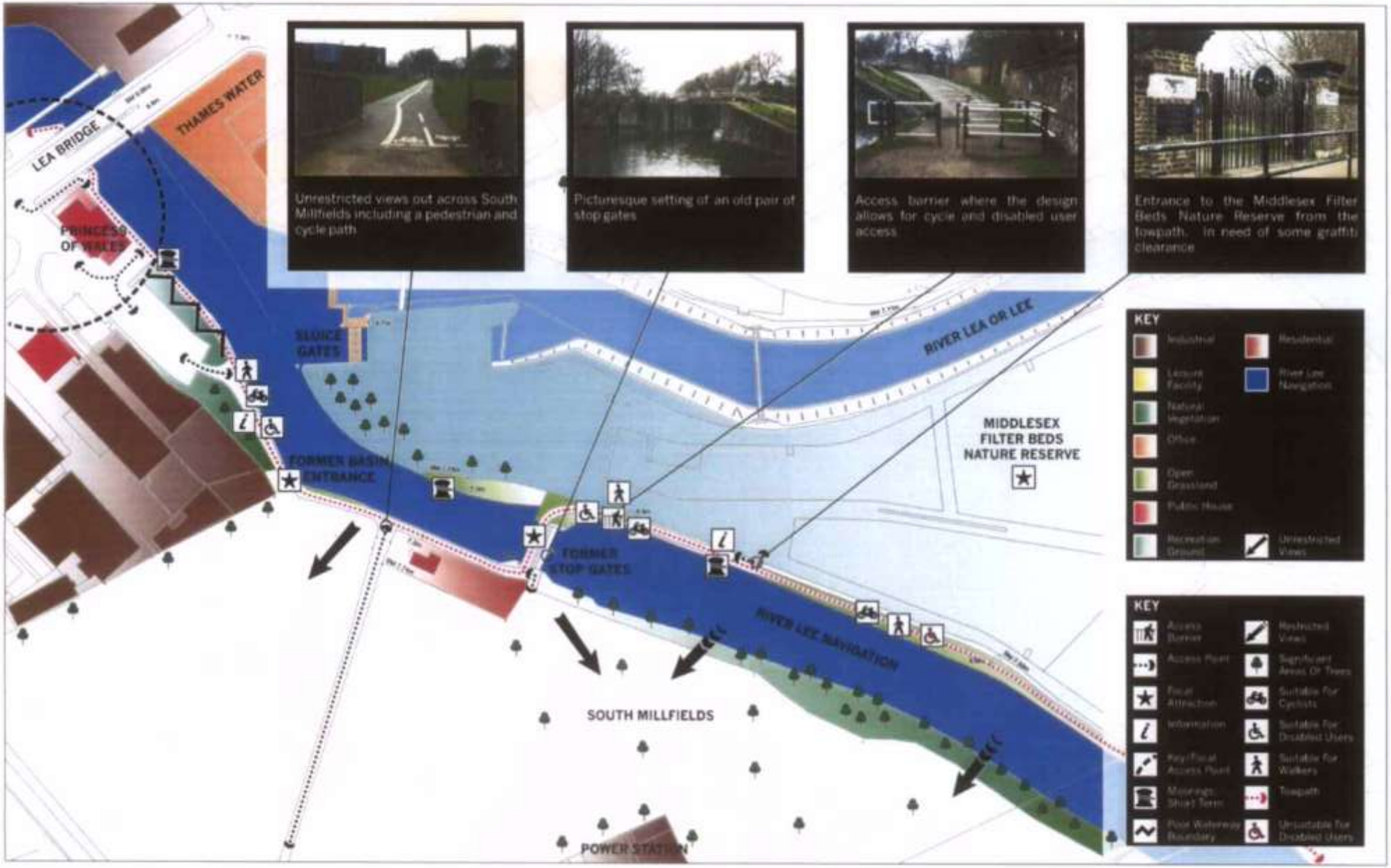
Unsightly wooden security fence topped with barbed wire gives a negative view on the towpath boundary

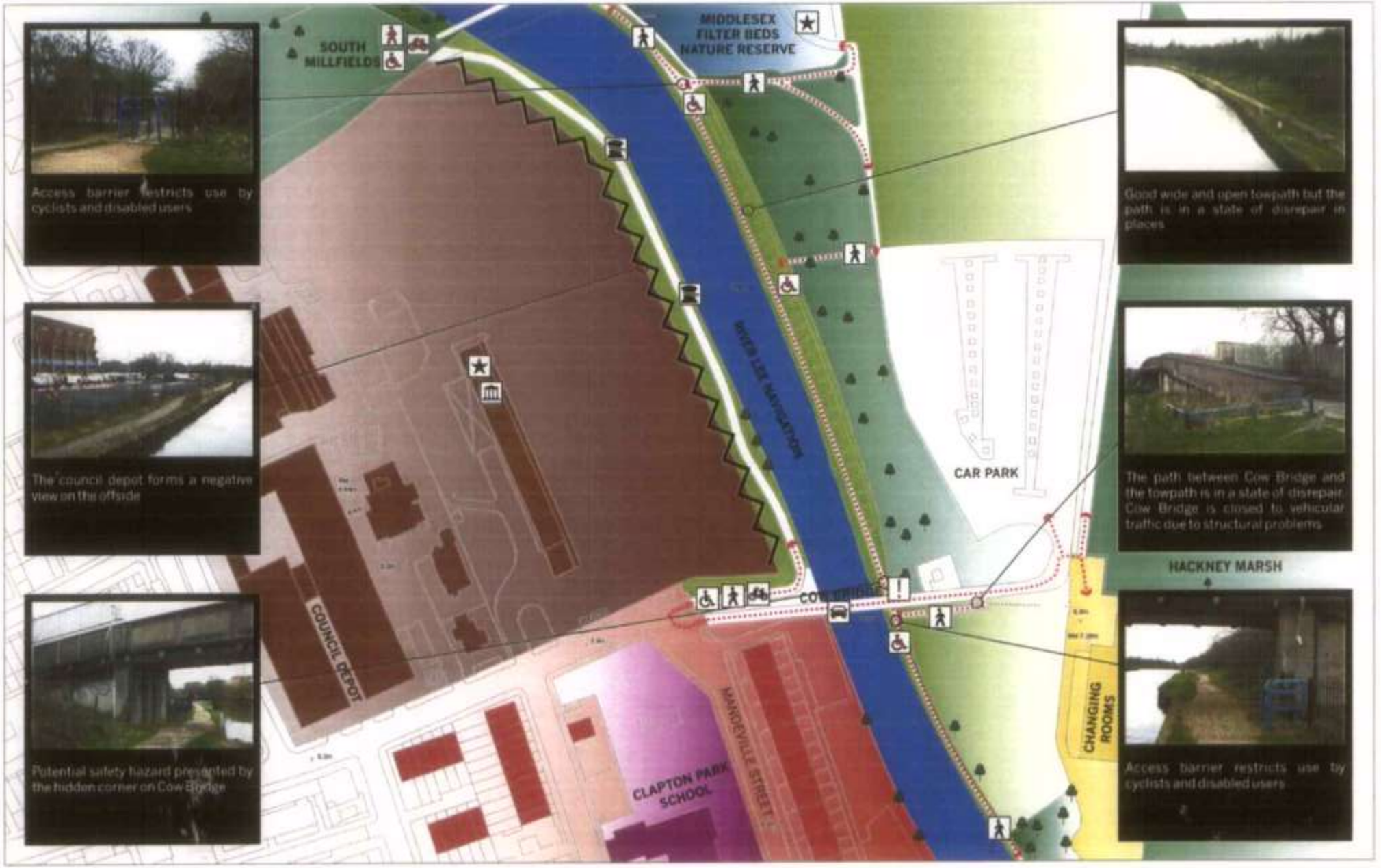


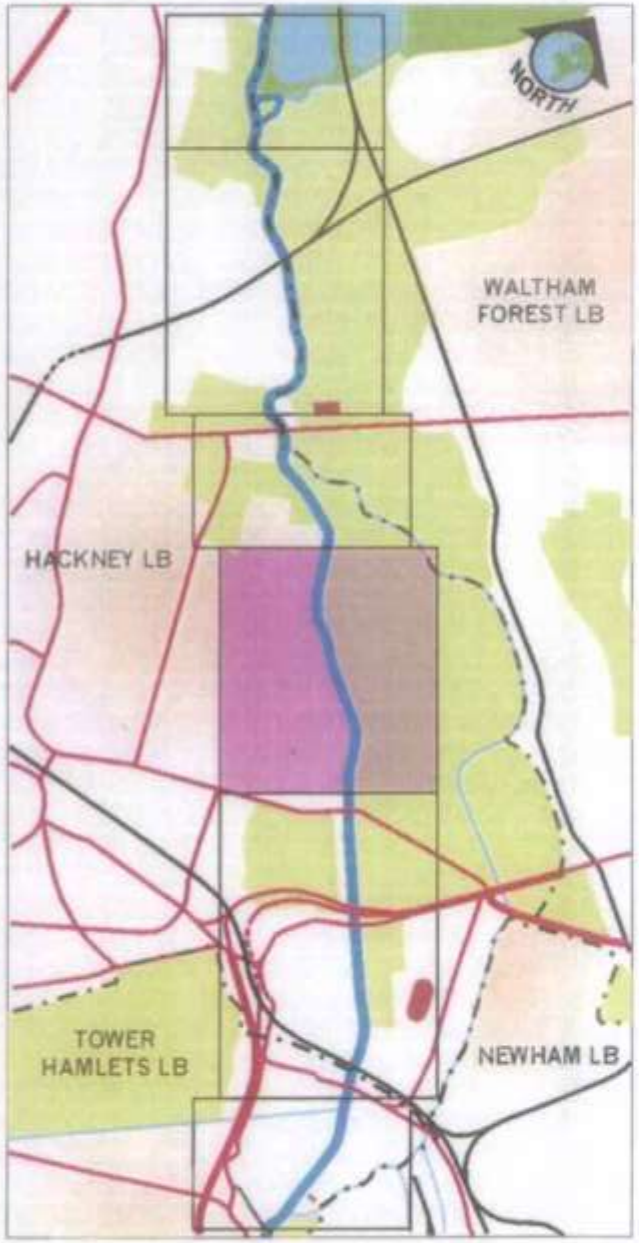
North Millfields provides one of the few sitting areas along the towpath



Innovative plaque set in the towpath, which indicates the direction of the Lee Valley Walk


LEA BRIDGE
THAMES WATER
PRINCESS OF WALES
SLUICE GATES
FORMER BASIN ENTRANCE
FORMER STOP GATES
RIVER LEA OR LEE
MIDDLESEX FILTER BEDS NATURE RESERVE
RIVER LEE NAVIGATION
SOUTH MILLFIELDS
POWER STATION
Unrestricted views out across South Millfields including a pedestrian and cycle path
Picturesque setting of an old pair of stop gates
Access barrier where the design allows for cycle and disabled user access
Entrance to the Middlesex Filter Beds Nature Reserve from the towpath, in need of some graffiti clearance
KEY
Industrial
Residential
Leisure Facility
River Lee Navigation
Natural Vegetation
Office
Open Grassland
Public House
Recreation Ground
Unrestricted Views
KEY
Access Barrier
Restricted Views
Access Point
Significant Areas Of Trees
Focal Attraction
Suitable For Cyclists
Information
Suitable For Disabled Users
Key Focal Access Point
Suitable For Walkers
Moorings Short Term
Towpath
Poor Waterway Boundary
Unsuitable For Disabled Users


SOUTH MILLFIELDS
MIDDLESEX FILTER BEDS NATURE RESERVE
RIVER LEE NAVIGATION
CAR PARK
COUNCIL DEPOT
CLAPTON PARK SCHOOL
MANDEVILLE STREET
CHANGING ROOMS
HACKNEY MARSH
Access barrier restricts use by cyclists and disabled users
Good wide and open towpath but the path is in a state of disrepair in places
The council depot forms a negative view on the offside
The path between Cow Bridge and the towpath is in a state of disrepair. Cow Bridge is closed to vehicular traffic due to structural problems
Potential safety hazard presented by the hidden corner on Cow Bridge
Access barrier restricts use by cyclists and disabled users



CHARACTER DESCRIPTION

Tranquil, pleasant area with the open expanse of the Hackney Marsh Recreation Grounds on the nearside with predominantly housing on the offside, as well as one factory directly north of Marshgate Bridge and part of the Hackney Marsh Recreation Grounds sandwiched between the housing. There is an existing footbridge linking the recreation grounds over the River Lee Navigation.

ADJACENT LAND USE

- Industrial.
- Residential.
- Amenity/leisure.

VIEWS/VISUAL LINKAGES

- Uninterrupted views out over Hackney Marsh football pitches.
- Across to Hackney Marsh on the offside into the housing.
- Into the corridor from Marshgate Bridge (Homerton Road).
- Daubeney Road Footbridge and Cow Bridge.

RECREATION/COMMUNITY LINKAGES

- Access from:
- Marshgate Bridge (Homerton Road) via a ramp or steps.
- Hackney Marsh Recreation Grounds.
- Daubeney Road Footbridge via a ramp for steps.
- Cow Bridge via a ramp.

- Hackney Marsh Recreation Grounds.
- Housing and schools on the offside.

STRENGTHS/ATTRIBUTES

- Open space of Hackney Marsh Recreation Grounds.

WEAKNESSES

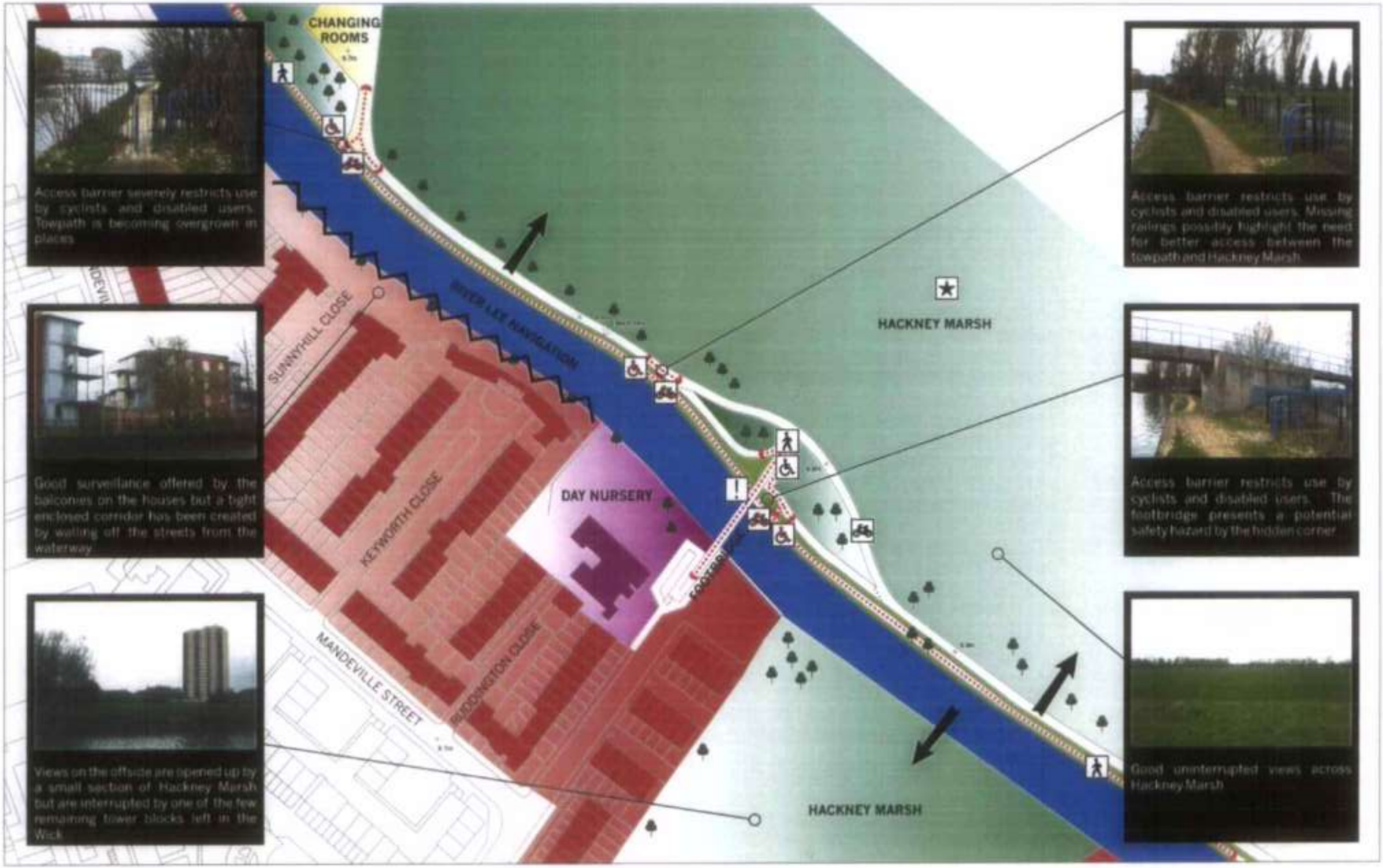
- Single factory on this stretch.
- Towpath in need of some repair/widening.

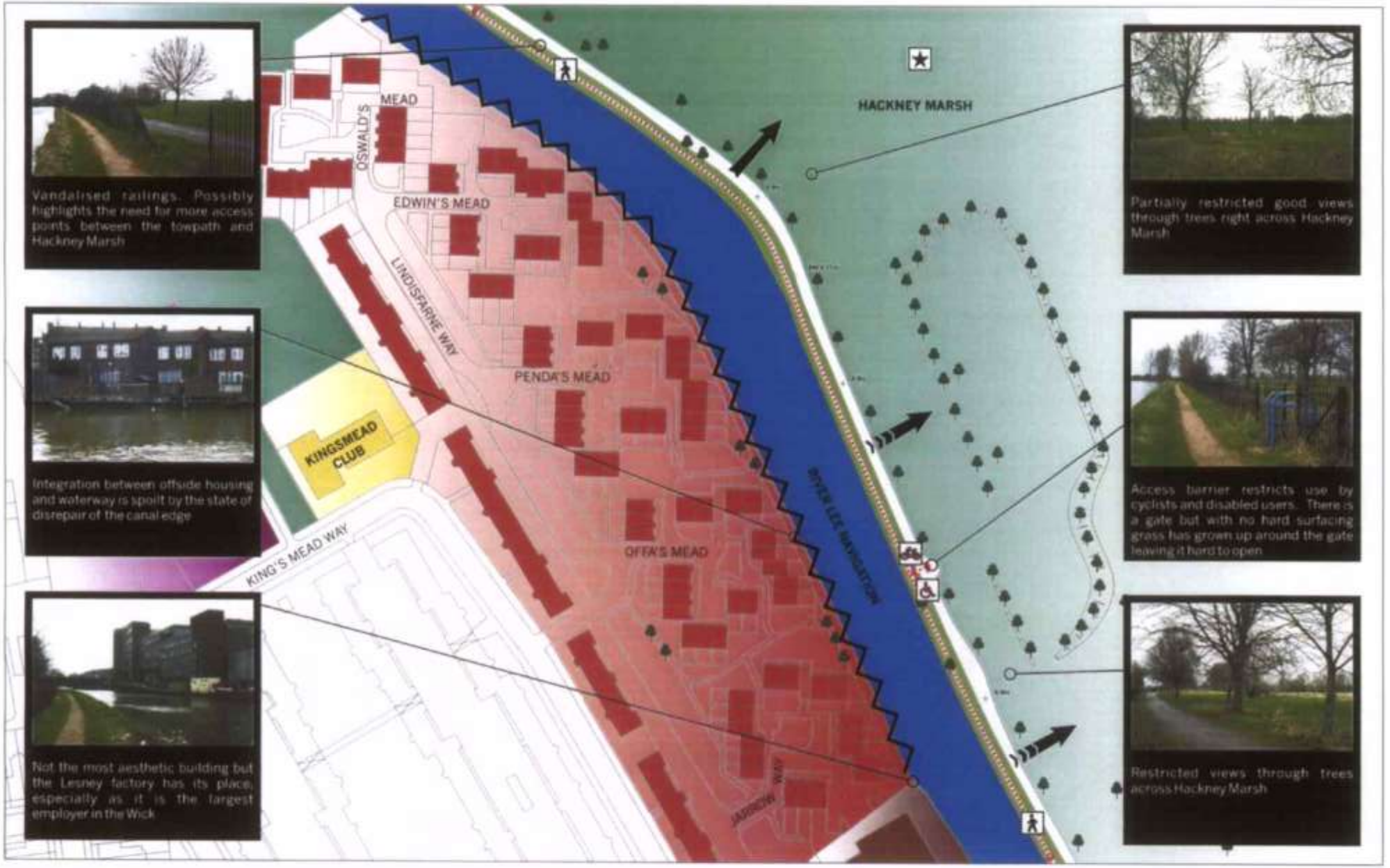
OPPORTUNITIES

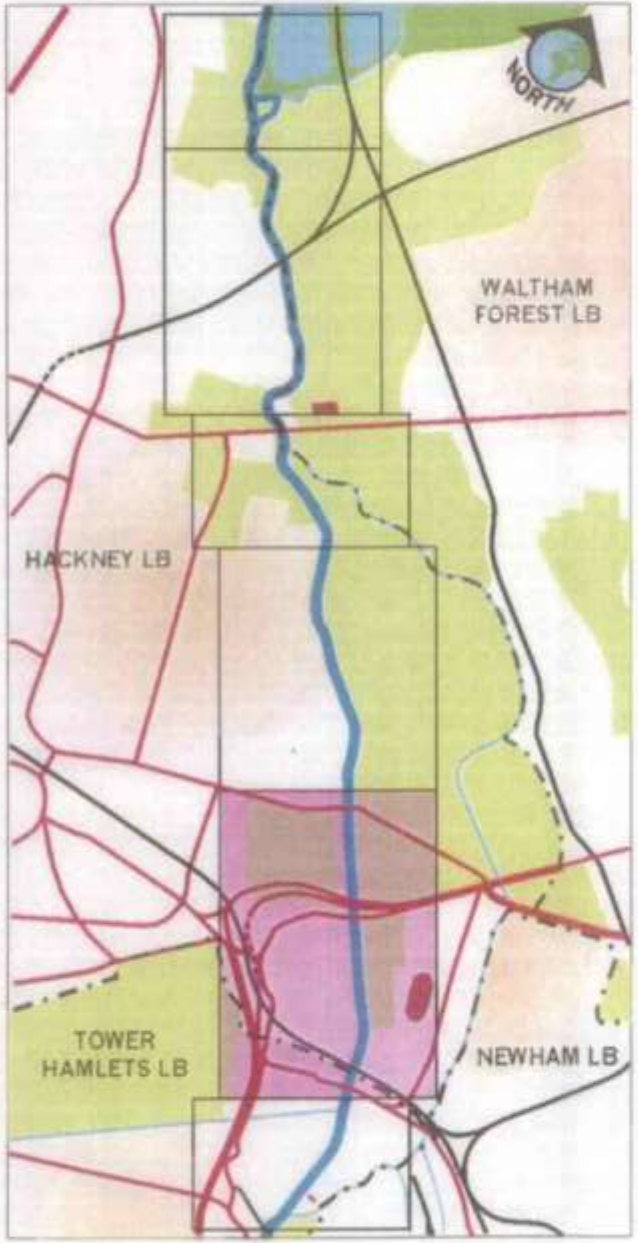
- Improve on access/linkages.

THREATS

- Japanese knotweed invading part of the towpath.


CHANGING ROOMS
RIVER LEE NAVIGATION
HACKNEY MARSH
SUNNYHILL CLOSE
KEYWORTH CLOSE
DAY NURSERY
FOOTBRIDGE
MANDEVILLE STREET
RUDDINGTON CLOSE
HACKNEY MARSH
Access barrier severely restricts use by cyclists and disabled users. Towpath is becoming overgrown in places
Access barrier restricts use by cyclists and disabled users. Missing railings possibly highlight the need for better access between the towpath and Hackney Marsh
Good surveillance offered by the balconies on the houses but a tight enclosed corridor has been created by walling off the streets from the waterway
Access barrier restricts use by cyclists and disabled users. The footbridge presents a potential safety hazard by the hidden corner
Views on the offside are opened up by a small section of Hackney Marsh but are interrupted by one of the few remaining tower blocks left in the Wick
Good uninterrupted views across Hackney Marsh


Vandalised railings. Possibly highlights the need for more access points between the towpath and Hackney Marsh
Integration between offside housing and waterway is spoilt by the state of disrepair of the canal edge
Not the most aesthetic building but the Lesney factory has its place, especially as it is the largest employer in the Wick
Partially restricted good views through trees right across Hackney Marsh
Access barrier restricts use by cyclists and disabled users. There is a gate but with no hard surfacing grass has grown up around the gate leaving it hard to open
Restricted views through trees across Hackney Marsh
OSWALD'S MEAD
EDWIN'S MEAD
PENDA'S MEAD
OFFA'S MEAD
LINDISFARNE WAY
KINGSMEAD CLUB
KING'S MEAD WAY
JASMINE WAY
HACKNEY MARSH
RIVER LEE NAVIGATION



CHARACTER DESCRIPTION

Mixed use development characterises this area which is bisected by four road bridges, one railway bridge and one closed footbridge. Initially industry encloses the corridor on both sides before the corridor opens up with the Arena Field Recreation Ground on the nearside and newly redeveloped housing on the offside. Hackney Stadium can be seen at the back of Arena Field. The corridor narrows again as you pass under the Eastway and the A102(M). North of these road bridges, housing and recreation ground can once again be found on the offside and nearside respectively. Wickfield Recreation Ground now forms a newly planted woodland.

ADJACENT LAND USE

- Industrial.
- Residential.
- Office.
- Amenity/leisure.

VIEWS/VISUAL LINKAGES

- Out to Hackney Stadium and the superb building marking Gainsborough Primary School.
- Also presently across Wick Field until the trees become established.
- Into the corridor from White Post Lane Bridge, Eastway Bridge and Marshgate Bridge (Homerton Road).

RECREATION/COMMUNITY LINKAGES

- Access from:

- White Post Lane Bridge via a ramp.
- Arena Field Recreation Ground.
- Eastway Bridge via a ramp.
- Wick Field Recreation Ground.
- Marshgate Bridge (Homerton Road) via a ramp or steps.

- Hackney Wick Stadium.
- Arena Field Recreation Ground.
- Hackney Wick Station.
- Wick Field Recreation Ground.
- Links to Mabley Green Recreation Ground and housing and school on the offside.

STRENGTHS/ATTRIBUTES

- Open space of Arena Field and Wick Field
- Hackney Stadium
- Redeveloped housing.

WEAKNESSES

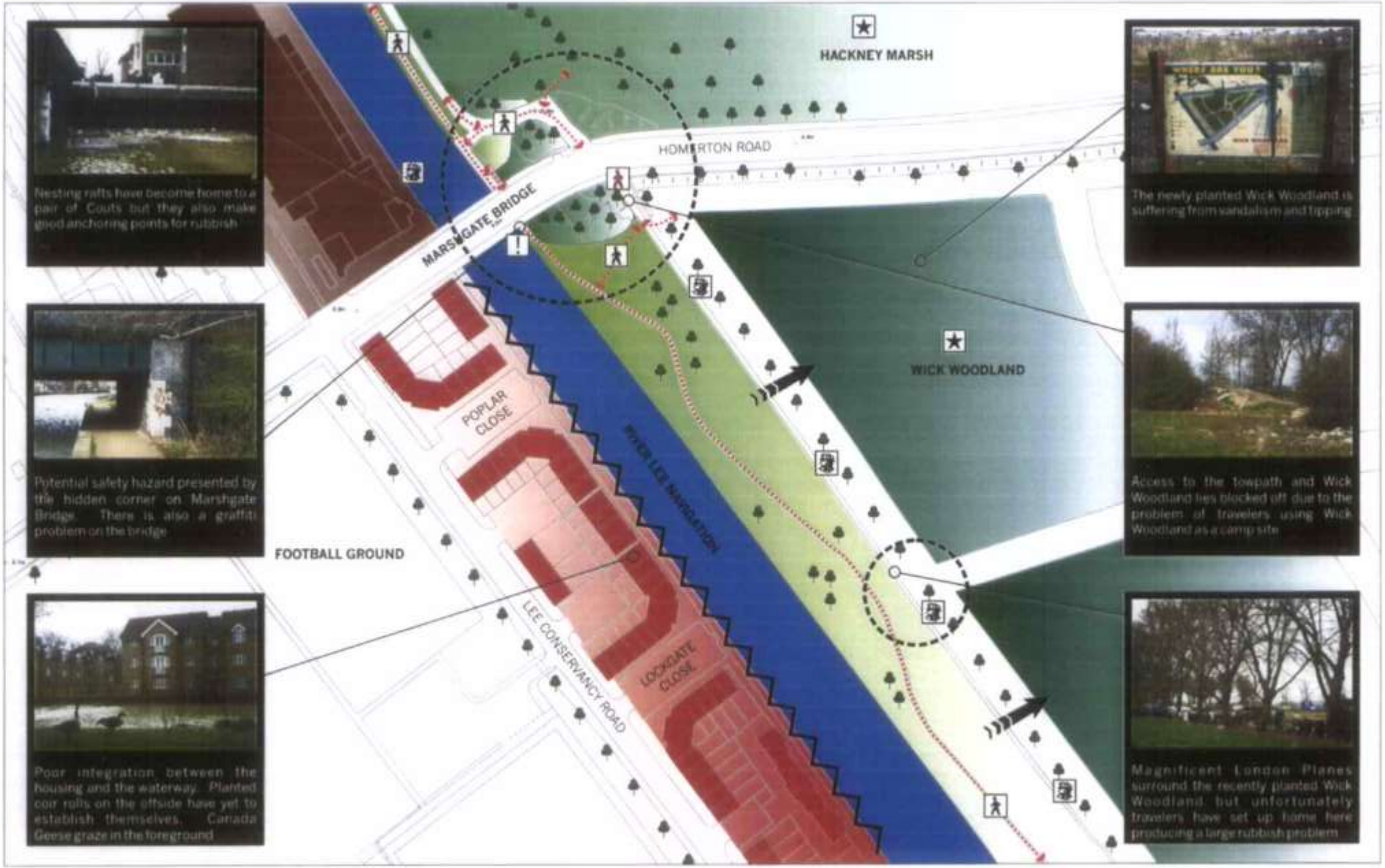
- Dumping on Arena Field and Wick Field.
- Travellers camping on Wick Field
- Closed off concrete footbridge.
- Disused open space beneath A102(M).
- State of the towpath north of the A102(M).

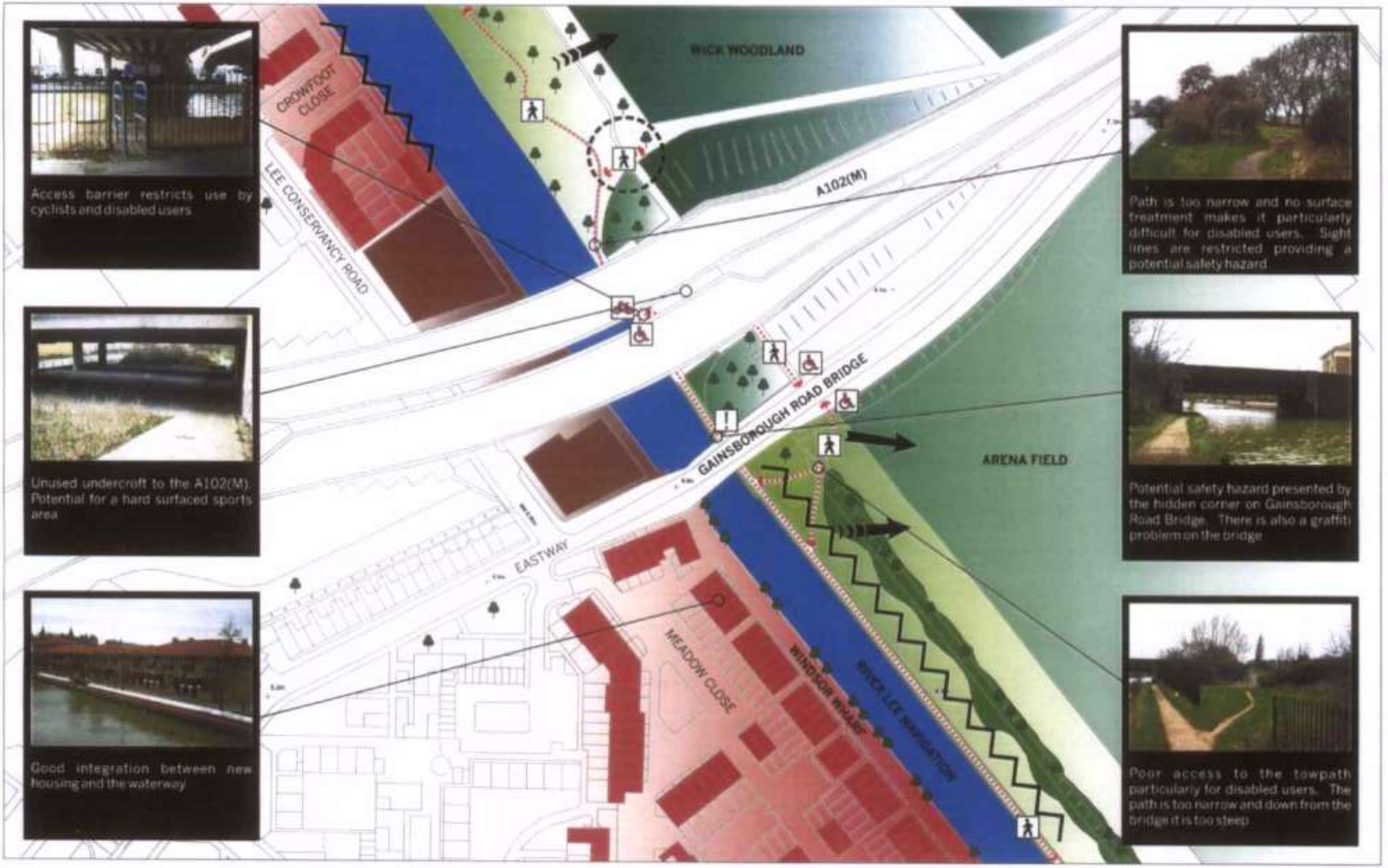
OPPORTUNITIES

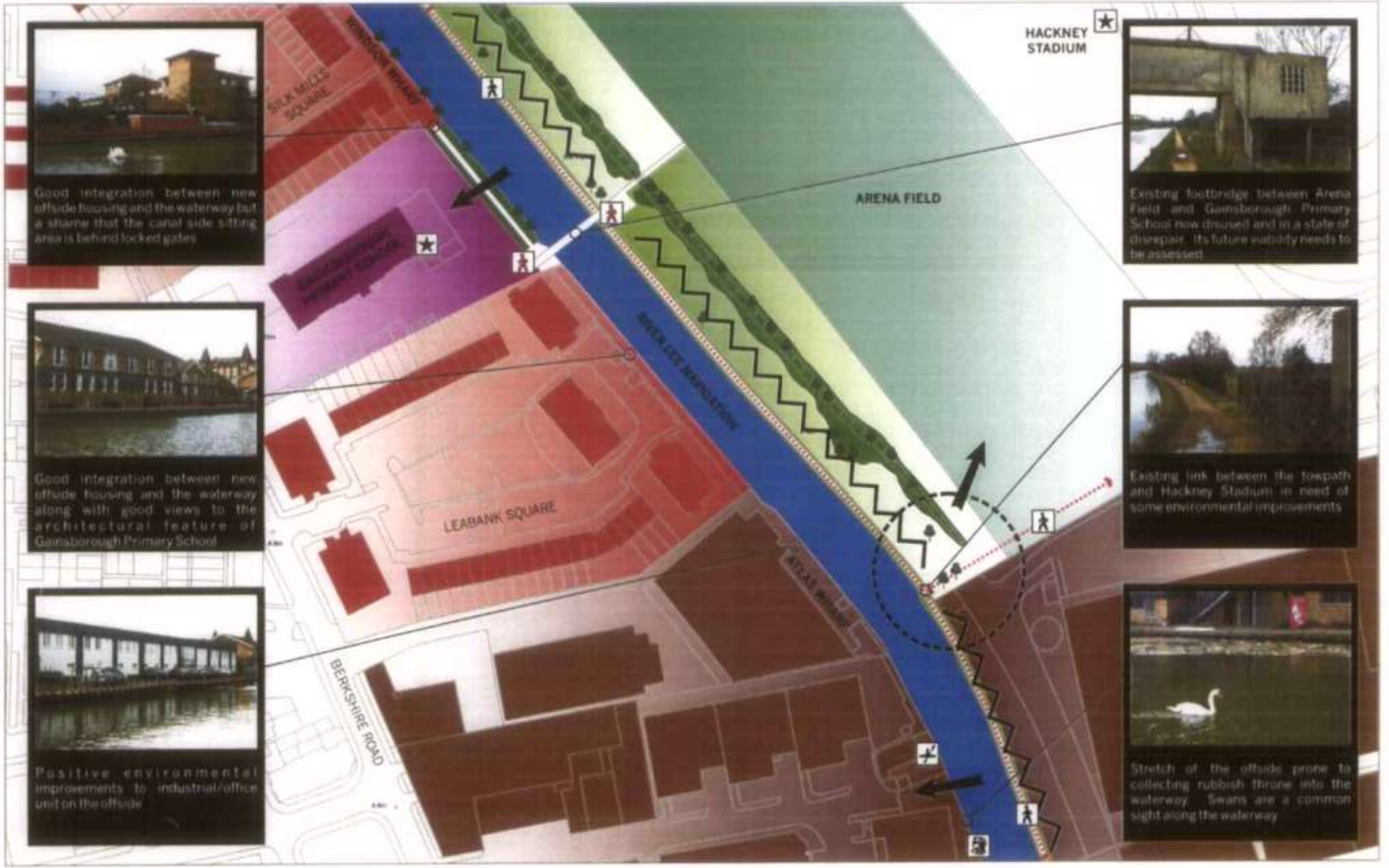
- Proposed redevelopment of Hackney Stadium.
- Better integration between the towpath and the recreation grounds.
- New footbridge.
- Proposals for the open space beneath A102(M).

THREATS

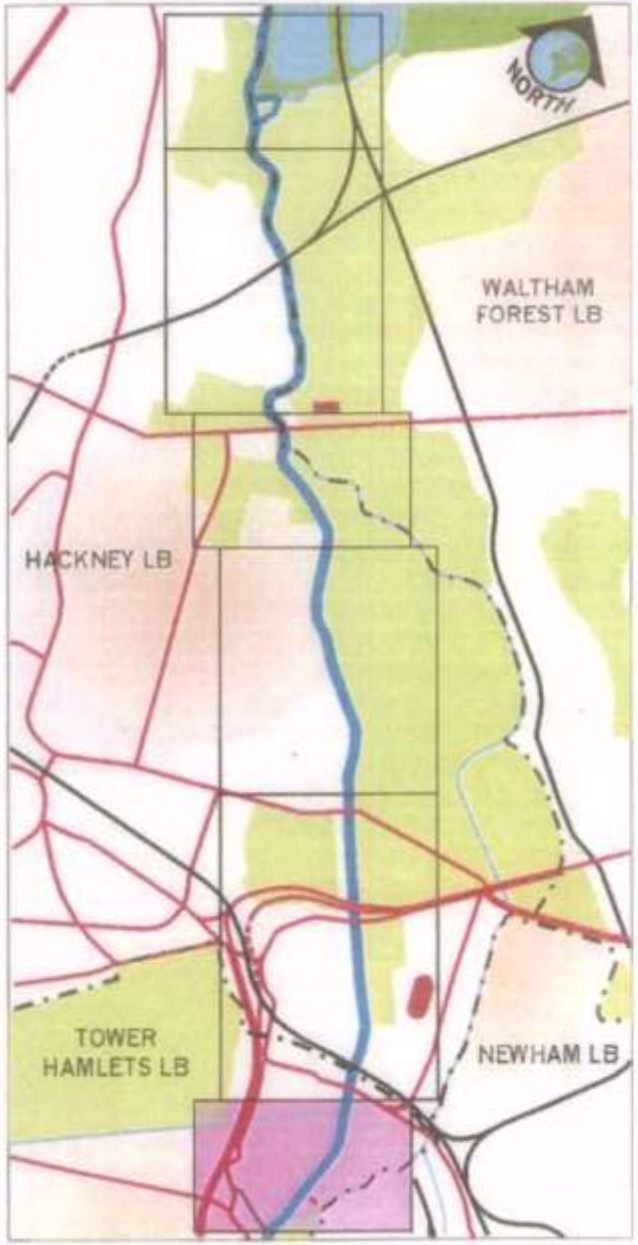
- Proposed redevelopment of Hackney Stadium.


HACKNEY MARSH
HOMERTON ROAD
MARSHGATE BRIDGE
WICK WOODLAND
POPLAR CLOSE
FOOTBALL GROUND
LEE CONSERVANCY ROAD
LOCKGATE CLOSE
Nesting rafts have become home to a pair of Coots but they also make good anchoring points for rubbish
The newly planted Wick Woodland is suffering from vandalism and tipping
Potential safety hazard presented by the hidden corner on Marshgate Bridge. There is also a graffiti problem on the bridge
Access to the towpath and Wick Woodland has blocked off due to the problem of travelers using Wick Woodland as a camp site
Poor integration between the housing and the waterway. Planted coir rolls on the offside have yet to establish themselves. Canada Geese graze in the foreground
Magnificent London Planes surround the recently planted Wick Woodland but unfortunately travelers have set up home here producing a large rubbish problem


WICK WOODLAND
CROWFOOT CLOSE
LEE CONSERVANCY ROAD
A102(M)
GAINSBOROUGH ROAD BRIDGE
ARENA FIELD
EASTWAY
MEADOW CLOSE
WINDSOR ROAD
WICK LEE NAVIGATION
Access barrier restricts use by cyclists and disabled users
Path is too narrow and no surface treatment makes it particularly difficult for disabled users. Sight lines are restricted providing a potential safety hazard
Unused undercroft to the A102(M). Potential for a hard surfaced sports area
Potential safety hazard presented by the hidden corner on Gainsborough Road Bridge. There is also a graffiti problem on the bridge
Good integration between new housing and the waterway
Poor access to the towpath particularly for disabled users. The path is too narrow and down from the bridge it is too steep


HACKNEY STADIUM
ARENA FIELD
LEABANK SQUARE
BERKSHIRE ROAD
RIVER LEE NAVIGATION
Good integration between new offside housing and the waterway but a shame that the canal side sitting area is behind locked gates
Good integration between new offside housing and the waterway along with good views to the architectural feature of Gainsborough Primary School
Positive environmental improvements to industrial/office unit on the offside
Existing footbridge between Arena Field and Gainsborough Primary School now disused and in a state of disrepair. Its future viability needs to be assessed
Existing link between the towpath and Hackney Stadium in need of some environmental improvements
Stretch of the offside prone to collecting rubbish throne into the waterway. Swans are a common sight along the waterway

EAST CROSS CENTRE
HACKNEY WICK STATION
RIVER LEE NAVIGATION
QUEENS YARD
KINGS YARD
WHITE POST LANE
CARPENTER'S ROAD
HAMLET INDUSTRIAL ESTATE
HERTFORD UNION CANAL
BOW INDUSTRIAL PARK
Unsightly towpath boundary. Possible need for the towpath to be widened to accommodate a pedestrian link between Hackney Wick Station and Stadium
Potential safety hazard presented by the hidden corner on the railway bridge and the overgrown scrub vegetation on the canal edge. There is also a graffiti problem on the bridge.
Potential for a footbridge across the canal forming a pedestrian link from Hackney Wick train station to the towpath leading onto Hackney Wick Stadium
Potential safety hazard presented by the hidden corner on Carpenter's Road Bridge.
Access barrier restricts use by cyclists and disabled users
Access barrier & ramp restricts use by disabled users



CHARACTER DESCRIPTION

Generally enclosed section of canal dominated by industry. The towpath is, for the majority of its length, fenced off by tall security fencing mounted on a small concrete retaining wall with the Bow Industrial Park lying behind. On the offside older works back onto the canal. The southern corner of the River Lee Navigation and Hertford Union Canal is blighted by derelict works and dumped boats with illegal residential moorings. Old Ford Locks with the adjacent Big Breakfast TV show cottage provide the focal point along this stretch.

ADJACENT LAND USE

- Industrial.
- Office.

VIEWS/VISUAL LINKAGES

- Generally enclosed.
- Down the Hertford Union Canal.
- Into the corridor from White Post Lane Bridge.

RECREATION/COMMUNITY LINKAGES

- Access from:
- Dace Road across Old Ford Locks.
- River Lee across footbridge.
- White Post Lane via a ramp.
- Hertford Union Canal via White Post Lane Bridge.
- Big Breakfast TV show cottage.
- Hackney Wick Station.

STRENGTHS/ATTRIBUTES

- Old Ford Locks
- Big Breakfast TV show cottage.
- Junction of the River Lee Navigation and River Lee.
- Junction of the River Lee Navigation and Hertford Union Canal.
- Historic railway lines found on towpath.

WEAKNESSES

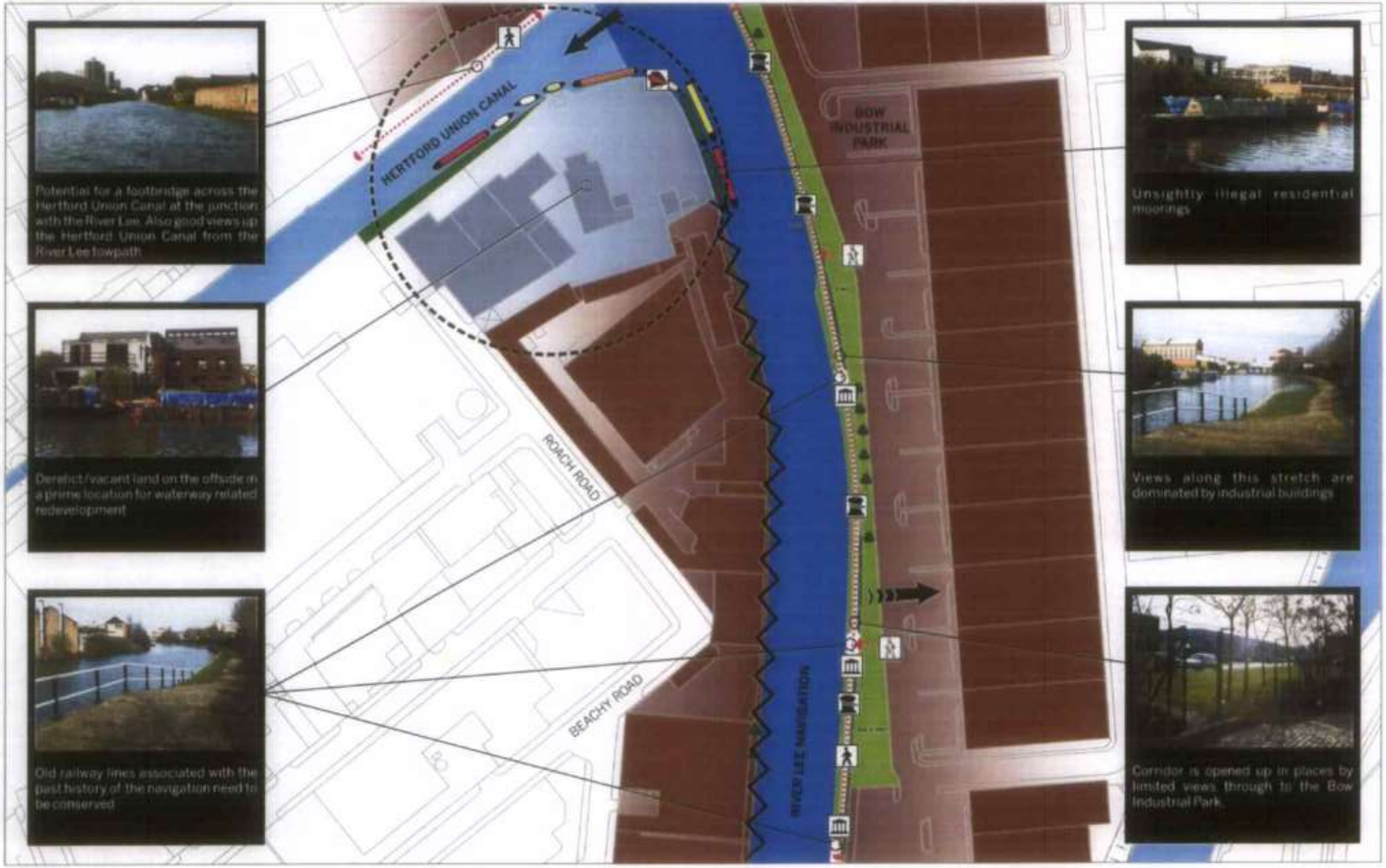
- Derelict Buildings.
- Dumped/sinking boats.
- Illegal residential moorings.
- Lack of greenery.

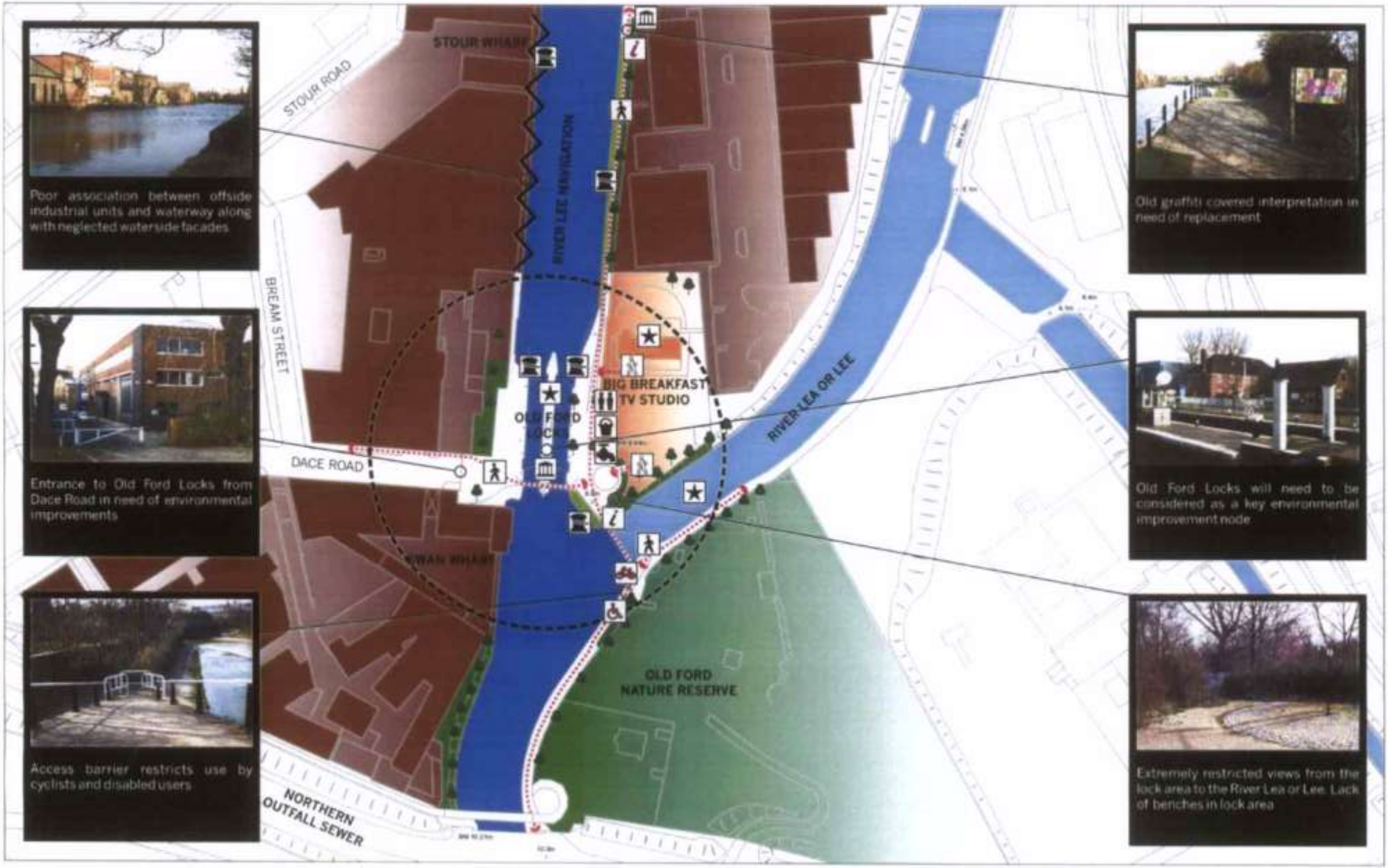
OPPORTUNITIES

- Redevelop derelict buildings.
- Landscaping of Old Ford Locks/Big Breakfast.
- New moorings.

THREATS

- Old works backing up onto the canal falling into disrepair/dereliction.


HERTFORD UNION CANAL
BOW INDUSTRIAL PARK
ROACH ROAD
BEACHY ROAD
RIVER LEE NAVIGATION
Potential for a footbridge across the Hertford Union Canal at the junction with the River Lee. Also good views up the Hertford Union Canal from the River Lee towpath
Derelict/vacant land on the offside in a prime location for waterway related redevelopment
Old railway lines associated with the past history of the navigation need to be conserved
Unsightly illegal residential moorings
Views along this stretch are dominated by industrial buildings
Corridor is opened up in places by limited views through to the Bow Industrial Park.


STOUR WHARF
STOUR ROAD
RIVER LEE NAVIGATION
BREAM STREET
BIG BREAKFAST TV STUDIO
OLD FORD LOCK
DACE ROAD
RIVER LEA OR LEE
KWAN WHARF
OLD FORD NATURE RESERVE
NORTHERN OUTFALL SEWER
Poor association between offside industrial units and waterway along with neglected waterside facades
Old graffiti covered interpretation in need of replacement
Entrance to Old Ford Locks from Dace Road in need of environmental improvements
Old Ford Locks will need to be considered as a key environmental improvement node
Access barrier restricts use by cyclists and disabled users
Extremely restricted views from the lock area to the River Lea or Lee. Lack of benches in lock area

6 ECOLOGICAL CHARACTER ANALYSIS

6 ECOLOGICAL CHARACTER ANALYSIS

INTRODUCTION

Although built for commerce and trade, the creation of the London's canal system has resulted in a network of linear wildlife corridors in the heart of London, which has increased and enhanced London's biodiversity.

This ecological character analysis of the flora and fauna found in the Lee Navigation corridor is based on a walk-through conducted by British Waterways Environmental and Scientific Services in June 2000 and a desk study referencing the London Borough of Hackney's Environmental Audit: Hackney Wick (1998) and The Lee Valley Regional Park Authority: Biodiversity Action Plan (2000).

It should be stressed that the recommendations in this study are basic. Further ecological surveys will be needed and the collaboration between organisations undertaking conservation projects in the Lee Valley is vital in order to develop and implement the recommendations in past, current and future studies.

CURRENT DESIGNATED SITES OF CONSERVATION INTEREST

The entire London canal network, including the Lee Navigation has been designated a Site of Metropolitan Importance (SMI) for nature conservation as a result of its intrinsic value for wildlife and because it provides public access to nature; the latter is particularly important where canals pass through the inner city boroughs.

As well as the Navigation itself, there are other sites of national, borough and local importance adjacent to the canal e g.:

- Walthamstow Marshes Site of Special Scientific Interest (SSSI)
- Springfield Park Local Nature Reserve (LNR)
- Middlesex Filter Beds Site of Metropolitan Importance (SMI)

These sites bounded by the River Lee (SMI) and the Lee Navigation form an important wildlife corridor in East London.

BIODIVERSITY INITIATIVES RELEVANT TO THE LEE NAVIGATION

The London Biodiversity Action Plan (BAP)

The London Biodiversity Audit , launched in January 2000, highlights canals as one of 15 habitats in London that form London's biodiversity resource. It stressed the importance of the canal system in providing a network of linear wetlands that support a wide range of wetland communities and species.

The Lee Valley Regional Park Authority

Biodiversity Action Plan (BAP)

Published in February 2000, this BAP highlights the important habitats and species in the Park including several found on the Lee Navigation e.g. Rivers & Streams and Urban Habitats.

Any schemes to enhance the biodiversity of the Lee Navigation should refer to this BAP and seek to implement actions outlined and involve all interested parties.

KEY WATER QUALITY ISSUES

Fish – Kills

Very low Dissolved Oxygen concentrations throughout the Lower Lee, frequently occur under storm conditions and can result in fish mortalities below Tottenham locks. Storm conditions can exceed the capacity of the sewer system and Deephams STW and thereby result in overflows of untreated sewage effluent into the Lee Navigation and its tributaries. There is also some evidence suggesting an impact of hormones on the health of the fishery with an increasing proportion of female fish

Investigations to identify and resolve overflows is on-going through Environment Agenct routine monitoring and Thames Water's Asset Management Planning procedures. However, a more intensive investigation is currently being planned under London Waterways Partnership funding.

Microbiological Quality

Leaside Canoe Centre, opposite Springfield Marina, came out worst in a BW microbiological survey of such leisure facilities on BW waters. This is probably due to the low dilution of Deephams STW effluent in this stretch of the Lee navigation (up to 90%) and frequent overflows from the sewage systems upstream during storm conditions.

Cost of disinfection at Deephams STW could be very high (capital costs £Ms or £10Ms, annual operating costs £0.1M).

Eutrophication

High concentrations of nutrients, especially Phosphorus, cause eutrophication within the Lower Lee. Eutrophication is particularly prevalent in the Lee Navigation downstream of Lea Bridge weir due to the low flow rates apparent within this stretch.

The River Lee from Luton to Thames, the Lee navigation from Rye Meads to Chingford and all subsidaries have been designated Sensitive Areas Eutrophic (SAE) since 1998 This should therefore drive reductions in P. However, below Tottenham Lock, both the River Lee and the Lee Navigation have a low priority. The SAE status for the Lower Lee has to be raised in order to ensure phosphate removal is installed at Deephams STW. In addition, the current River Quality Objective for the Lower Lee is Grade 5 (the poorest quality standard) and therefore in order to drive water quality improvements this objective should be raised.

OVERVIEW OF THE ECOLOGICAL INTEREST OF THE LEE NAVIGATION

The London Borough of Hackney's Environmental Audit: Hackney Wick (March 1998) report provides an excellent overview of the ecology of Hackney Wick, including the Lee Navigation. A summary follows:

Habitats

The main habitats occurring within the Hackney Wick area include ruderal communities, rough grasslands, semi-ruderal tall-herb communities, marsh & reedswamp communities, aquatic communities and scrub & open plantation woodlands.

Apart from amenity grassland and ornamental planting, ruderal communities predominate due to frequent disturbance from industrial operations, disposal operations and construction in the area.

Grasslands in Hackney Wick are mainly coarse grasslands that merge into ruderal communities and scrub. Parts of the Walthamstow Marsh and Middlesex Filter Beds have areas of semi-natural grassland. Semi-natural grassland would have been the main vegetation type on Hackney Marsh in the past, but today sports-turf dominates

Hawthorn and elder are common on wasteland and industrial sites and often form areas of scrub Native tree plantings are widespread around the edges of parks and sports grounds e g Wick Wood project, with more mature trees being scattered around the area, especially along the River Lee.

The watercourses of Hackney Wick support small areas of aquatic and emergent vegetation e g angelica, hemlock water dropwort and reed canary-grass. Middlesex Filter Beds provides a larger area of marshy vegetation The edges of the Lee navigation support a small number of plants rare in inner London e g skullcap.

Species

There are several important areas for birds in Hackney Wick, especially between the River Lee and Lee Navigation.

- Hackney Marsh is an important winter feeding area for gulls in the winter
- Middlesex Filter Beds supports over 30 species of breeding bird including sparrowhawk, reed warbler and tree sparrow
- Walthamstow Marsh SSSI is one of the last surviving marshlands in the London area with over 400 plant species and 40 species of breeding bird including marsh, sedge and reed warbler. Waders such as snipe, wildfowl including mallard, tufted duck, little grebe and water rail, and raptors such as sparrowhawks and kestrels have all been recorded in the marsh.

The river and navigation are important for fish, although the Lee Anglers Consortium have indicated that periodic pollution surges have resulted in a decline in fish numbers

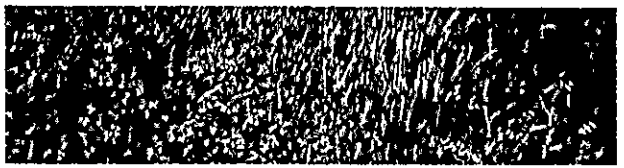
The Lee Navigation is regularly stocked with roach, beam and perch and are therefore the predominate species, with small numbers of tench, carp, pike, gudgeon and eel also occurring

Bats are uncommon in the Wick due to the openness of the green space. However pipistrelles have been observed at the Middlesex Filter Beds and occasionally seen foraging over the River Lee.

CHARACTER AREAS

ZONE ONE – Springhill Sports Ground to Horse Shoe Bridge

ZONE TWO – Horse Shoe Bridge to Middlesex Wharf Foot Bridge

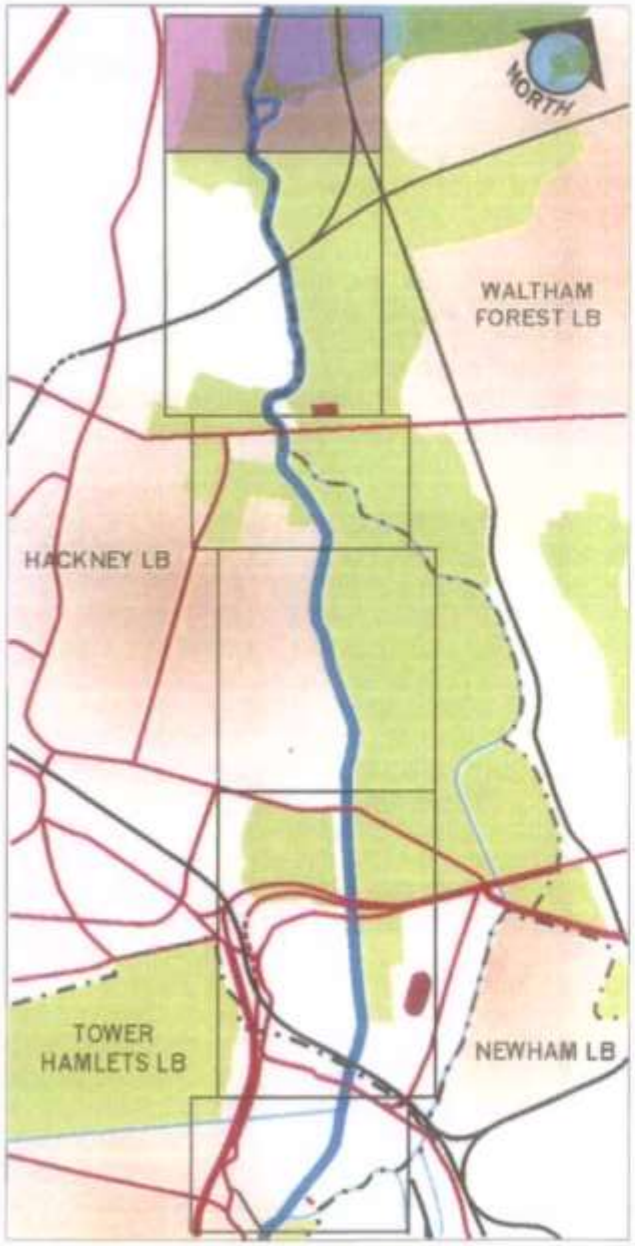


ZONE THREE – Middlesex Wharf Foot Bridge to Cow Bridge

ZONE FOUR – Cow Bridge to Marshgate Bridge

ZONE FIVE – Marshgate Bridge to Carpenter's Road Bridge

ZONE SIX – Carpenter's Road Bridge to Old Ford Locks



CHARACTER DESCRIPTION

This section has an open and 'green' feel with large areas of adjacent open space on both sides.

On the east side the navigation opens out into Walthamstow Marshes SSSI. It is one of the last surviving marshlands in London area with over 400 plant species and 40 species of breeding bird including marsh, sedge and reed warbler. Waders such as snipe, wildfowl including mallard, tufted duck, little grebe and water rail, and raptors such as sparrowhawks and kestrels have all been recorded in the marsh.

On the west side is Springfield Park, part of which is a local nature reserve. There are areas of amenity grassland, longer grass left uncut for the benefit of wildlife, tennis courts and cycle/footpaths. Part of the bank is lined with willows, with allotments and children's activities centres on the bankside.

Springfield Marina curves round an island covered in trees, mainly willows.

This section of the navigation appears open and friendly with suitable areas for children's activities and education.

STRENGTHS/ATTRIBUTES

- Good paths which link the navigation with adjacent Walthamstow Marshes SSSI and Springfield Park.
- Island in Springfield marina.
- Kids activity area and rowing/canoe club adjacent to the navigation.
- Good open views over the marshes from Horseshoe Bridge.

WEAKNESSES

- Vertical, hard bank protection restricting the opportunity for emergent vegetation to become established.

ZONE ONE – Springfield Park – Local Nature Reserve

ZONE ONE – Springfield Marina and Horse Shoe Island

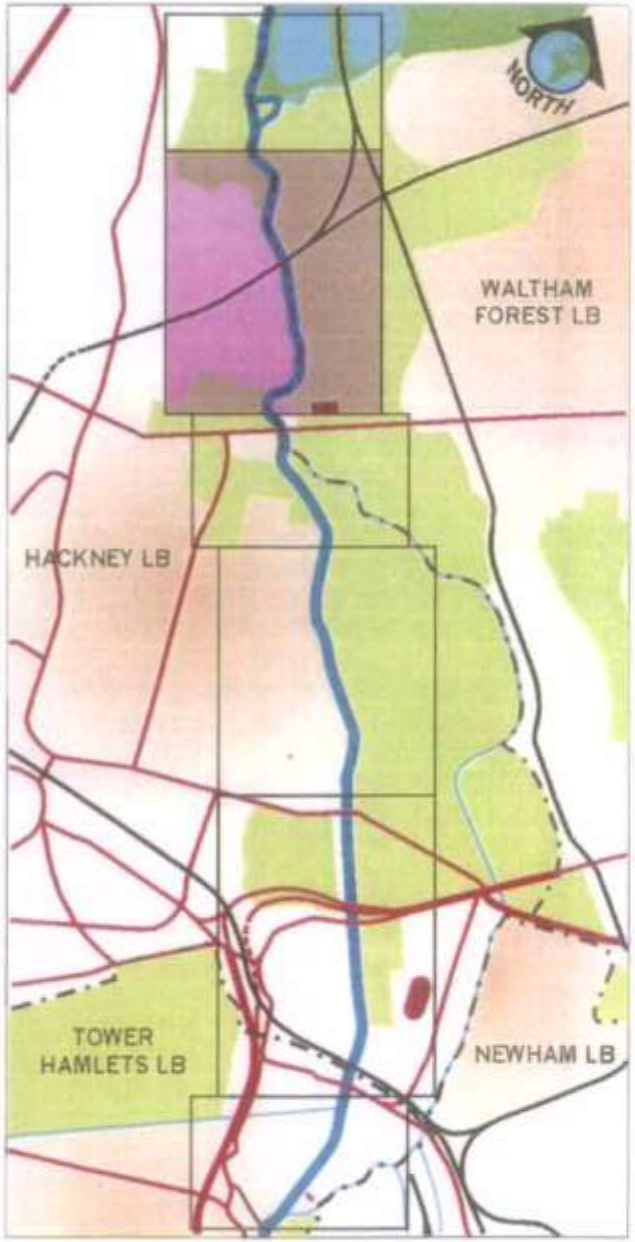
OPPORTUNITIES

- Collaborate to encourage kids, through the activity centres, local schools etc. to get involved with nature along the navigation e.g. Waterway's Challenge.
- Collaborate to create emergent planting opportunities along the section.
- Survey the island in Springfield Marina and manage accordingly, with the aim to maximise benefit for wildlife e.g. if suitable put up bird and bat boxes.

THREATS

- Poor water quality especially during storm conditions.

ZONE ONE – Springhill



CHARACTER DESCRIPTION

In this section the main area of ecological interest is on the adjoining land to the east of the navigation. Here the navigation opens out into Walthamstow Marshes SSSI which is one of the last surviving marshlands in London area with over 400 plant species and 40 species of breeding bird.

The west side is urban in nature and there is little ecological interest as far as the railway bridge except for a few plant species growing out of cracks in the walkway eg rosebay willowherb. Beyond the bridge the towpath bank verge is vegetated, including small sycamore saplings. Of note is the presence of a small amount of giant hogweed which is a risk to public health and requires management.

Below the bank verge there is a bed of floating pennywort, another invasive alien, with a coot nest. The rapid growth and spread of floating pennywort can cause a number of problems such as, a reduction in native aquatic plant and animal species, a reduction in the integrity of flood defence by restriction of flow and blocking of bottlenecks and interference with recreational activities and navigation. Best management control is currently being investigated.

Access can be gained on either side of the navigation, with paths running along both sides.

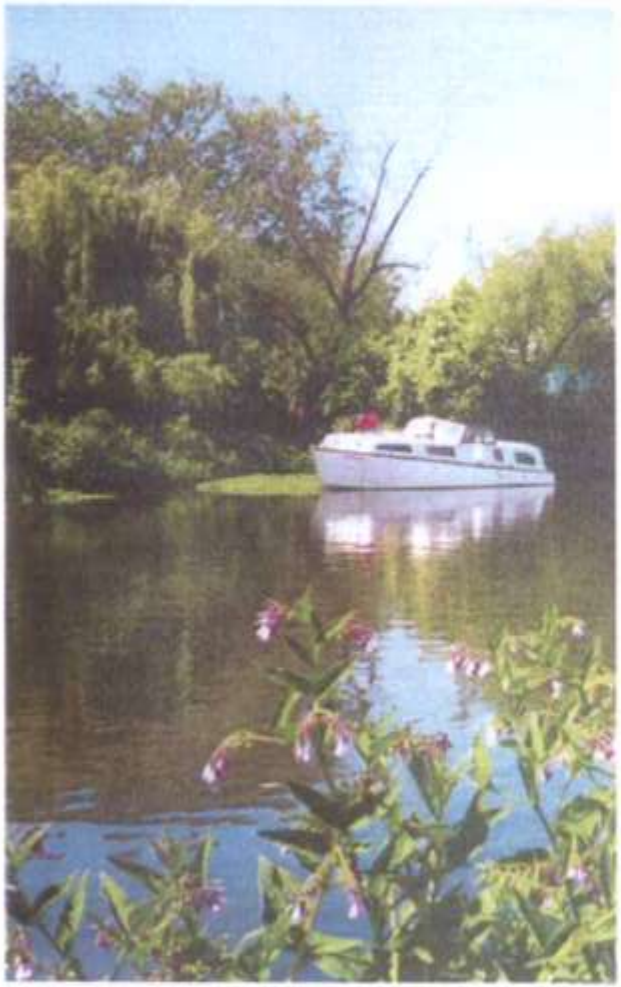
Despite the vertical steel piling the channel has abundant submerged and emergent vegetation including water dock and the alien floating pennywort. There is also large amounts of duckweed and algae.

STRENGTHS/ATTRIBUTES

- Adjacent Walthamstow Marshes SSSI.
- Breeding coot.
- Areas of submerged and emergent vegetation in channel.

ZONE TWO – Walthamstow Marshes SSSI

ZONE TWO – Walthamstow Marshes Offside Planting



WEAKNESSES

- Hard bank protection.
- Unattractive hard walkway on west side with little vegetation.
- Litter accumulation.
- Graffiti on walls.

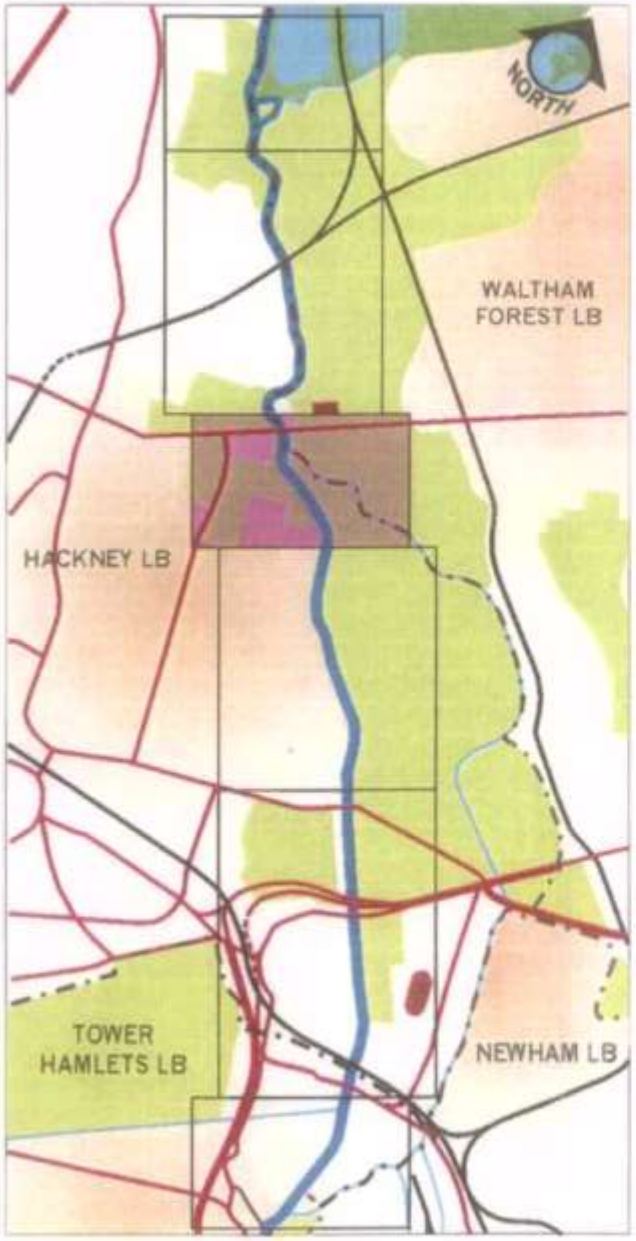
OPPORTUNITIES

- Collaborate to undertake terrestrial planting in order to make the west side walk more aesthetically pleasing.
- Retain and extend areas of aquatic and emergent vegetation.
- Encourage local community to feel 'ownership' of the navigation and discourage litter dropping and accumulation.
- Control the alien giant hogweed and floating pennywort.
- Collaborate to retain and extend areas of aquatic and emergent vegetation through appropriate management and planting schemes.
- Encourage ivy growths on walls which will increase bird and invertebrate habitat whilst deterring graffiti.

THREATS

- Giant hogweed poses a threat to public health and should be controlled accordingly.
- Increase in graffiti.
- Presence of the North American invasive species, floating pennywort may out compete native species.

ZONE TWO – Walthamstow Marshes SSSI



CHARACTER DESCRIPTION

South of Middlesex Wharf Foot Bridge the navigation turns a large bend. There is a mixture of land use, including industrial units and amenity parkland.

The channel has the usual vertical hard bank protection except for an offside (east) section on the first bend. This area of soft, eroded bank is an oasis for wildlife. Trees, including sycamore, willow and poplar, line the bank with areas of elder and nettles. The bank itself has a number of unidentified holes which require further investigation.

In the channel are large areas of submerged and emergent vegetation including the North American invasive species, floating pennywort. This habitat attracts birds and their young. Two families of coot, a greylag goose with six young, a brood of moorhen and a coot nest building were all recorded in this section during the walk-through. A cormorant and heron were also seen fishing.

South of Lea Bridge there is a good section for biodiversity with the Middlesex Filter Beds Nature Reserve and the River Lea on the towpath side and a section of soft bank with poplars and the South Millfields amenity park on the offside.

Of note is the presence of the North American invasive species, floating pennywort. The rapid growth and spread of this plant can cause a number of problems such as, a reduction in native aquatic plant and animal species, a reduction in the integrity of flood defence by restriction of flow and blocking of bottlenecks and interference with recreational activities and navigation. Best management control is currently being investigated.

Middlesex Filter Beds Nature Reserve support successional wetland communities including reed and sedge dominated communities. There are also areas of thorn scrub and willow & birch scrub. An area of semi-natural grassland has also been created. These habitats provide habitat of over 30 species of breeding bird including sparrowhawks, reed warbler and tree sparrow. Migrant species also find refuge here.

Past South Millfields there is Middlesex Filter Beds Nature Reserve and Hackney Marsh on the towpath side and a council depot and housing on the offside.

A small area of emergent vegetation has been planted on the offside, opposite the changing room and yellow water lilies occur in the channel. The offside bank adjacent to the depot has had some tree planting. The towpath is between one and two metres wide with a wide boundary verge with nettles, comfrey, grasses and then scrub merging into Hackney Marsh. This area provides great habitat for birds. Japanese knotweed and giant hogweed are prevalent at both ends of the section and require control.

STRENGTHS/ATTRIBUTES

- Soft wooded bank on the offside.
- Areas of native submerged and emergent vegetation.
- Large number of birds attracted to the area due to the soft bank and aquatic vegetation.
- Adjoining amenity grassland.
- Adjacent Middlesex Filter Beds Nature Reserve.
- Offside trees and soft bank with areas of emergent vegetation adjoining South Millfields Park.
- Breeding coot and mallard. Also moorhens present.
- Submerged and floating vegetation by Pond Lane Bridge.
- Area of planted emergent vegetation.
- Yellow water lilies in the channel.
- Five metre boundary verge with great bird habitat.
- Adjacent Hackney Marsh.

WEAKNESSES

- Vertical hard bank protection throughout the majority of the section.
- 'shabby' appearance on the towpath side adjacent to the amenity grassland e.g. boundary verge of predominately nettles.
- Tall bare wall forming the boundary between the navigation and the nature reserve.

- Giant hogweed.
- Abundant duckweed.
- Japanese knotweed.

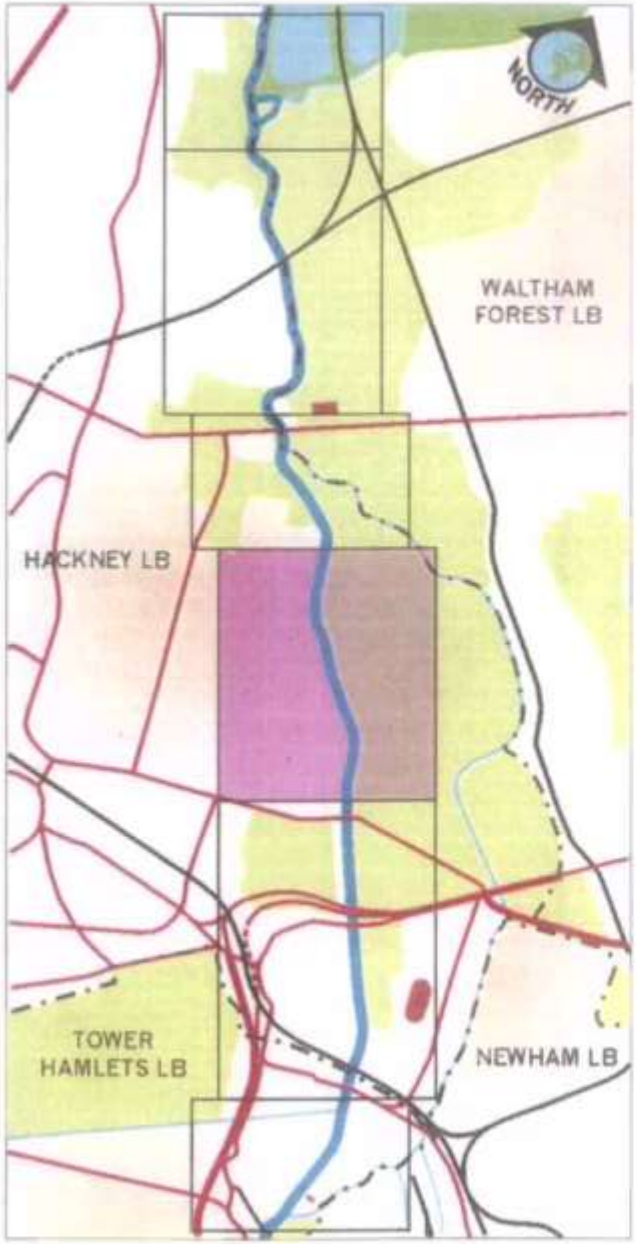
OPPORTUNITIES

- Collaborate to improve the diversity of towpath verges and thereby improve the visual impact of the area.
- Collaborate to manage areas of adjacent amenity grassland.
- Plant ivy on boundary walls to improve the visual quality of the area and provide habitat for birds and invertebrates.
- Retain and extend areas of native submergent and emergent vegetation.
- Seek to control floating pennywort through partnership.
- Survey the offside area of soft bank for mammals.
- Seek to encourage the local community to take ownership of the canal and discourage litter dropping.
- Collaborate with partners to undertake management of areas of South Millfields for the benefit of wildlife, thereby widening the navigation corridor.
- Encourage ivy growth on the wall adjoining the nature reserve to create bird and invertebrate habitat and discourage graffiti.
- Retain and extend planted emergent vegetation.
- Liaise with Clapton Park School to encourage children to learn about the biodiversity of the navigation e.g. Waterways Challenge.
- Interpretation where the path from the filter beds meets the towpath.
- Collaborate with council to seek to improve ecological value of the offside and widen the wildlife corridor. Could encourage the schools involvement.
- Investigate the opportunities to create grassland and wetland habitat on suitable areas of Hackney Marsh in order to widen the wetland corridor.

THREATS

- Litter accumulation.
- Presence of the North American invasive species, floating pennywort.
- Duckweed and algae threaten to cover the channel.
- Giant hogweed is a health risk to public, and in view of the proximity of Clapton park School, management should be a priority.
- Spread of Japanese knotweed creating a monoculture.

ZONE THREE – Giant Hogweed



CHARACTER DESCRIPTION

Straight section with the towpath opening out into Hackney Marsh. Housing and an area of amenity grassland makes up the offside. There is evidence of offside planting schemes in the past.

The ecological interest in this section is concentrated on the towpath side of the navigation with the adjacent Hackney Marsh and long uncut towpath verges.

STRENGTHS/ATTRIBUTES

- Wide, uncut bank verge.
- Planted areas of emergent vegetation.
- Submerged vegetation by the day nursery.
- Mosses/lichens on the bank wall.
- Common blue damselflies.
- Female mallard with four ducklings.
- Adjacent Hackney Marsh.
- An abundance of yellow water lilies in the channel.
- Good, wide verges on which the grass has been left uncut.
- Birds including mute swan, cormorant, coot and common tern.

WEAKNESSES

- Vertical steel piling restricting the opportunity for emergent vegetation to establish.
- Lack of emergent vegetation.

ZONE FOUR – Towpath Adjacent to Hackney Marsh

ZONE FOUR – Japanese Knotweed

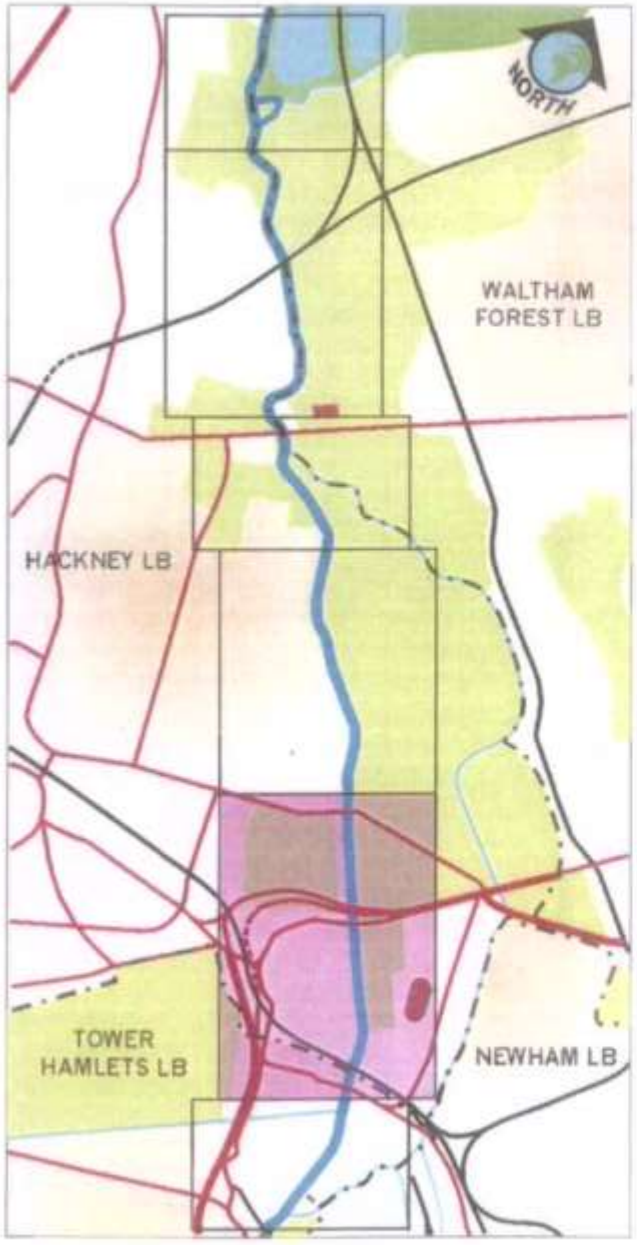
OPPORTUNITIES

- Extend existing areas of emergent vegetation and create new areas where suitable.
- Undertake effective control of the Japanese knotweed before it expands further.
- Collaborate to investigate the feasibility of enhancing, for the benefit of wildlife, the grassland of Hackney marsh adjacent to the Lee Navigation.
- Seek to create areas of emergent vegetation in suitable areas e.g. where the channel widens.
- Collaborate with local angling club to ensure damage to bank vegetation is avoided.
- Investigate the opportunities to create grassland and wetland habitat on suitable areas of Hackney Marsh in order to widen the wetland corridor.

THREATS

- Japanese knotweed along the towpath.
- Duckweed covering 50% of the channel in places.
- Abundant algae
- Bank vegetation damage by fishermen clearing pegs.

ZONE FOUR – Duckweed



CHARACTER DESCRIPTION

As with the previous section the ecological interest is concentrated on the towpath side with Hackney Marsh and Wick Woodland being of interest.

Hackney Marsh provides an important feeding area in winter for gulls, including occasional rare vagrants such as the Mediterranean and glaucous gulls. Redwings are seen in small flocks

Wick Woodland is a large block of recent plantings of native tree ands shrub species and its management for wildlife will greatly benefit the area.

As you approach Gainsborough Road Bridge the ecological interest is primarily concentrated on the towpath side of the navigation with towpath verges of wildflowers blending into the adjacent grassland and trees of Arena Field and the planted trees of the Wick Wood project.

The offside is of less interest due to its urban nature, although planted areas of emergent vegetation at Lockgate Close, Poplar Close, Marshgate Bridge, Windsor Wharf, Gainsborough Road Bridge and Crowfoot Close have created pockets of good habitat. Two coots have nested on areas of emergent vegetation at Marshgate Bridge and Gainsborough Road Bridge.

The main ecological features alongside Arena Field fall on the towpath side. Here, wide verges and the adjoining Arena Field provide a large area of open grassland and a belt of trees including alders, willow sp., elder and hawthorn which provides an important habitat for an abundance of small passerines. Other birds recorded include mallard, pied wagtail, magpie, cormorant and common tern.

Offside is a mixture of small industrial lots, new housing and a school. Apart from an area of ornamental planting by the school biodiversity is limited, although opportunities exists for enhancement.

Despite the presence of industry on both sides of the navigation south of Arena Fields, and road and rail bridges, the section has some areas of ecological interest and potential for enhancement.

Of most value are the towpath verges, especially north of Carpenter's Road Bridge, which are an average of two metres wide with a diverse number of native and ornamental species.

The channel is steep sided with hard bank protection. Emergent species are absent although there are opportunities for planting e.g. at Carpenter's Road Bridge. Several bird species were recorded during the walk through including mallard, pied wagtail, cormorant and common tern. Common blue damselflies were also seen on the bank verge.

STRENGTHS/ATTRIBUTES

- Narrow, winding towpath south of Marshgate Bridge (0.5m) with very wide verges either side.
- Yellow water lilies in the channel.
- Good patches of offside emergent vegetation at Lockgate Close, Poplar Close and Marshgate Bridge.
- Female mallard and brood.
- Adjacent Wick Woodland and Hackney Marsh.
- Adjacent Arena field.
- Offside emergent planting at Windsor Wharf, Gainsborough Road Bridge and by Crowfoot Close.
- Breeding coots on emergent vegetation at Marshgate Bridge and Gainsborough Road Bridge.
- Numerous birds species recorded.
- Submerged vegetation, fish fry & damselflies opposite Gainsborough School.
- Community/school sitting area with ornamental planting.
- Two metre wide verges attracting butterflies and damselflies.
- Submergent vegetation at the junction with the Hertford Union Canal.

WEAKNESSES

- Vertical edges with hard bank protection
- Limited emergent fringe.
- Dark areas under the motorway where vegetation cannot establish
- Abundant duckweed and algae that requires mechanical skimming
- Lack of emergent vegetation
- Litter accumulation by Carpenter's Road Bridge

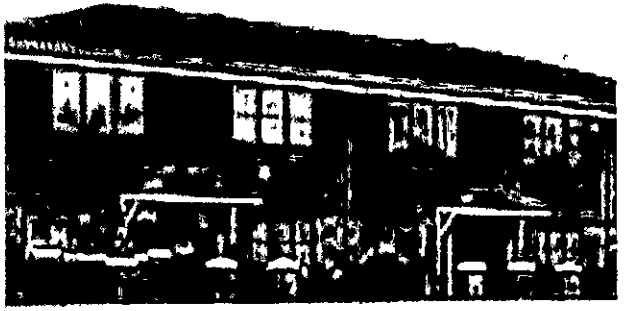
OPPORTUNITIES

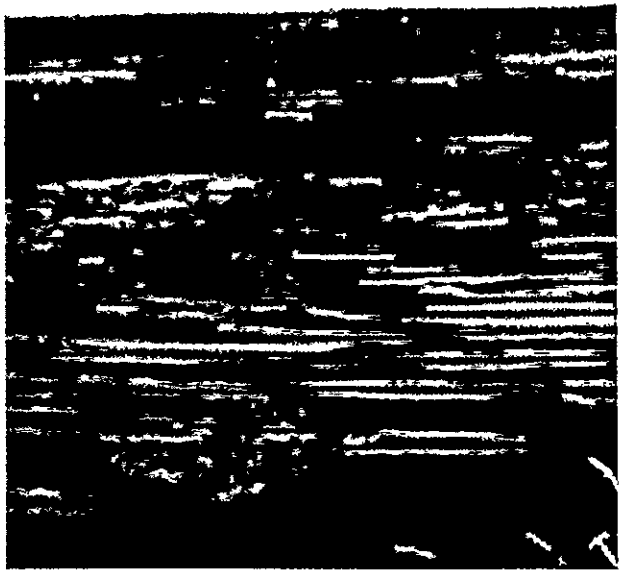
- Extend and create emergent fringe where possible.
- Review success of emergent planting schemes and extend where appropriate
- Control the Japanese knotweed to prevent the alien invasive spreading
- Encourage local schools e g. Gainsborough Primary School to use the navigation e.g. through educational packs such as the Waterways Challenge.
- Plant vegetation e.g. ivy to encourage habitat and deter graffiti on the bare boundary wall at East Cross Centre
- Through partnership, review the management of the arena field and implement methods to enhance the biodiversity of the area where appropriate.
- Encourage vegetation e.g ivy on high offside wall by Hamlet Industrial Estate.
- Increase diversity of verges adjacent to Hamlet Industrial Estate by reviewing mowing regime and adopting a regime to promote floristic diversity.
- Collaborate to plant emergent vegetation in appropriate areas
- Liaise with offside industry to encourage suitable offside planting e g. Sussex Wharf.
- Encourage offside ivy growth on bare walls to provide habitat for invertebrates and birds and deter graffiti.

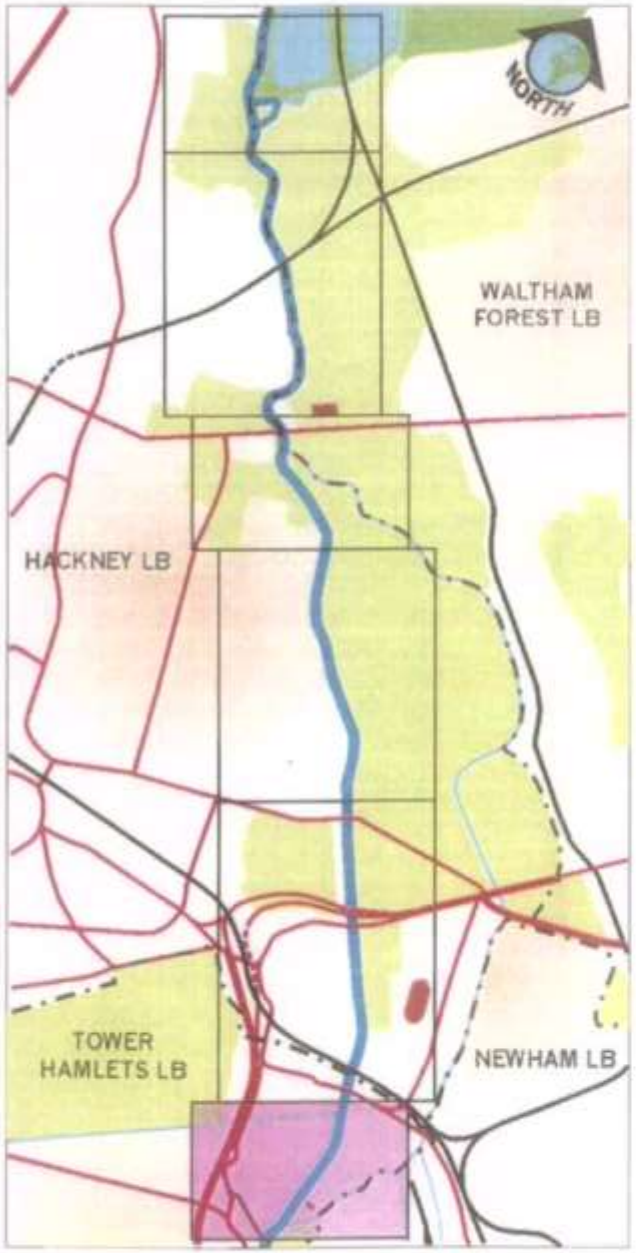
THREATS

- Litter accumulation.
- Large area of Japanese knotweed.
- Graffiti on walls
- Duckweed and algae present in abundance.

ZONE FIVE – Emergent Planting at Windsor Wharf







CHARACTER DESCRIPTION

Despite the urban context of this stretch of the navigation there are several points of ecological value.

The three metre wide bank verge, although not particularly species-rich, has been allowed to grow long and provides an important habitat for invertebrates. The boundary consisting of sycamores, ornamental shrubs and abundant ivy screens the navigation from Bow industrial park and provides cover for birds.

Below the Hertford Union Canal the corridor is urban in character with old and new industrial units located on both sides of the waterway. The ecological value is limited, primarily due to the vertical steel piled walls of the navigation inhibiting marginal and emergent vegetation growth. However features, such as the boundary with its mixture of native and ornamental vegetation provide cover for birds and other fauna. Swan Wharf provides the only area where vegetation e.g. ferns, hemlock water-droplet and buddliea can flourish

Of greatest interest is the proximity to two Sites of Borough Importance: Old Ford Nature Reserve and The Greenway.

Old Ford Nature Reserve, on the site of the Old Ford Pumping Station, supports expanses of scrub and tall herbaceous vegetation and an area of meadow. Trees, mostly sycamore, screen the meadow from the navigation. it is an exceptionally good area for birds and butterflies. The nature reserve belongs to Thames Water and is managed by the London Wildlife Trust and the Lower Lea Project.

The Greenway is a footpath and cycleway developed by Thames Water Utilites Ltd in partnership with local boroughs and LVPA. It provides a key pedestrian route in the Lower Lea Valley. It consists of a mosaic of rough vegetation and scrub. Rarities include the nationally scarce small-flowered catchfly and the first London record of the alien plant annual yellow-woundwort. Wheelchair access between the Greenway and Lee Navigation.

Opportunities to improve the biodiversity of this section would be welcome.

STRENGTHS/ATTRIBUTES

- Three metre wide bank verge, left uncut, providing good habitat for invertebrates.
- Boundary of trees and shrubs providing shelter for fauna.
- Areas of offside vegetation including buddleia.
- Abundant submergent vegetation.
- Damselflies, probably common blue, present.
- Lichens on bank wall.
- Coot, moorhen and common tern all recorded in this section.
- Stour Wharf. Stone wall with ferns and other vegetation in an otherwise steel piled area.
- Interpretation board.
- Good boundary habitat, with native and ornamental trees and shrubs.
- Good access, including wheelchair access, to The Greenway (Site of Borough Importance).
- Adjacent Old Ford Nature Reserve (Site of Borough Importance).

WEAKNESSES

- Vertical hard bank protection.
- Absence of emergent vegetation.
- Industrial units either side of the waterway, leaving little scope for widening the ecological value of the corridor.
- Large paved areas and wide surfaced towpath.

ZONE SIX – Swans on the Hertford Union Towpath

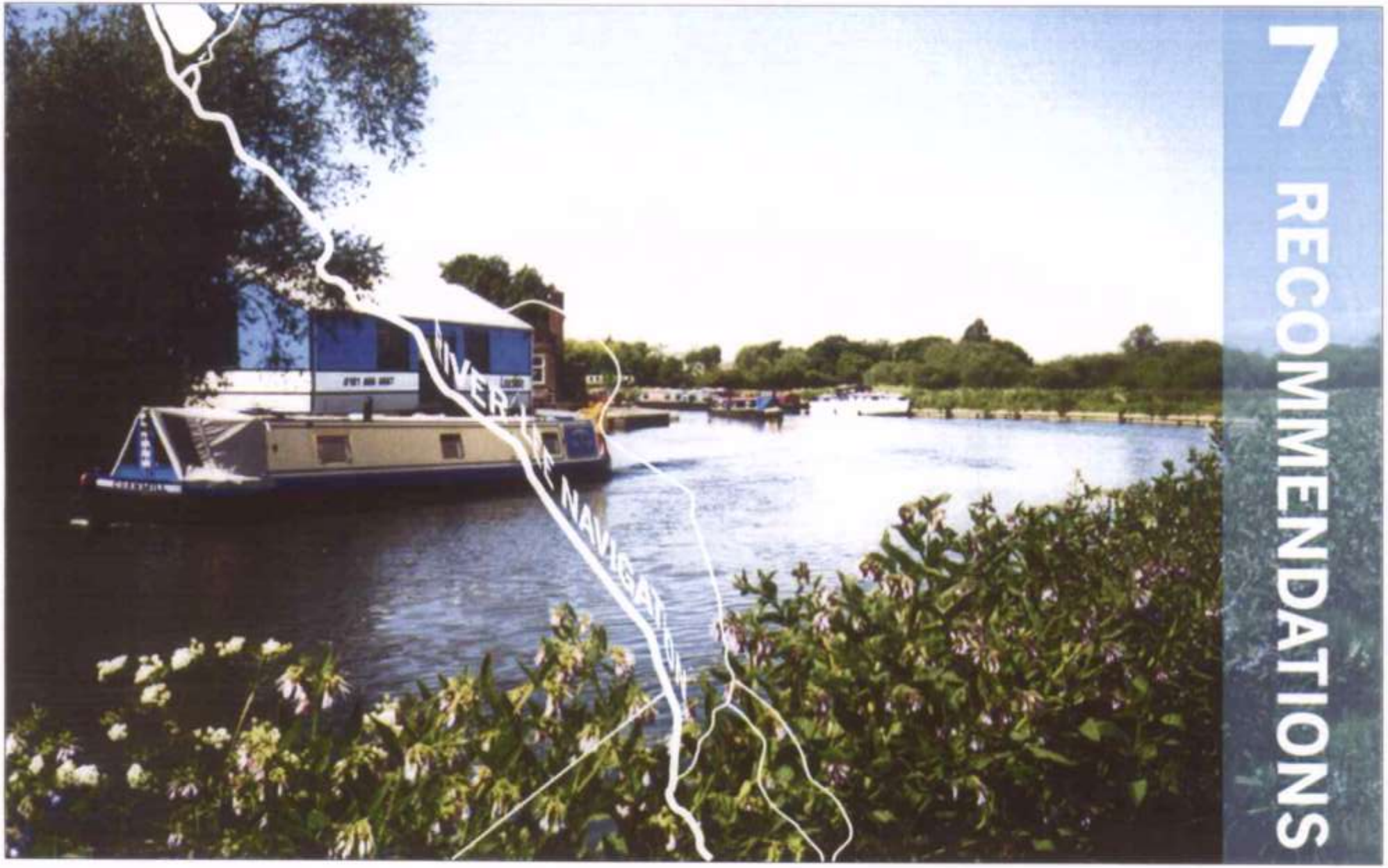
OPPORTUNITIES

- Increase the diversity of verges by reviewing the towpath management regime and adopting a method of practice to maximise diversity.
- Survey the submerged aquatic vegetation and manage accordingly.
- Encourage damselflies and waterbirds by creating suitable habitat.
- Collaborate to encourage emergent vegetation growth e.g. box piling.
- Collaborate on methods of increasing the biodiversity in the area especially linking in with Old Ford Nature Reserve and The Greenway.

THREATS

- Abundant duckweed.
- Replacement of the few areas of stone wall with steel piling causing loss of bankside vegetation e.g. Swan wharf.
- Offside warehouse regeneration leading to the limited vegetation.

ZONE SIX – Lichen



7 RECOMMENDATIONS

REGENERATION THROUGH WATERWAYS

Through the recognition in this study of the links which the River Lee Navigation has with the many facets of life in Hackney Wick and beyond, the recommendations proposed here will go a long way in making it possible to create a secure, well planned and carefully managed future for one of the Lee Valleys greatest potential assets.

It is essential that good planning, design and management underpins all projects, and the subtle qualities of scale, space and views offered by the relationship between land and water are fundamental to the successful waterside regeneration of the River Lee Navigation in Hackney Wick These factors have underlined the thinking behind all of the following recommendations in producing a series of proposals for the regeneration of the River Lee Navigation that will not only ensure that the setting and heritage of the navigation is conserved but can also be used as a catalyst and driving force in the regeneration of Hackney Wick.

STRUCTURE (DIRECTION)

The recommendations as set out in this section and in the Action Plan (Section 9) were initially structured by the Project Aims which were agreed between British Waterways and the Hackney Wick Regeneration Partnership at the outset of the study. These are:

Project Aims

- The river corridor as a catalyst for regeneration;
- Improvements to enhance the local environment – both built and natural;
- Developing the river's recreation potential,
- Reducing fear of crime and improving community safety,
- Improvements for access for all users,
- Contributions to sustainability issues including transport and waste transfer,
- Guidance for new development within the river corridor;
- The potential for the local community – both residential and business – to be closely involved in the future of the river corridor.

In accordance with the last aim for local community involvement, a large public consultation exercise was undertaken by Groundwork Hackney and the Lower Lea Project. The feedback from this consultation exercise identified the Priority Actions to arise from the Project Aims. These are:

Priority Actions

- Access Improvements·
  - Towpath barriers;
  - Towpath surface,
  - Signage;
- Business Activity & Premises Improvements:
  - Premises cleaning/improvements;
  - Premises to front the waterway,
  - New businesses focusing on leisure services;
- Environmental Quality Improvements:
  - Litter/floating debris;
  - Graffiti;
  - Management of waterway vegetation / invasive aquatic species;
  - Management and repair of fences / railings etc;
  - Waterway bank naturalisation;
  - Waterway pollution,
  - Waterway depth
- Waterway Amenity Improvements/Additions:
  - Boat hire,
  - Boat trips;
  - Cafes / Pubs / Restaurants;
  - Cycle hire;
  - Moorings
  - Public art,
  - Public toilets;
  - Signage, including bridge names.

The aforementioned Project Aims and Priority Actions are the driving force and main structure behind the following recommendations. The recommendations have also been guided by Unitary Development Plan policy's, the Lee Valley Regional Park Authority's Park Plan, Part One & Two, Strategic Policy Framework & Proposals and by other organisations with an interest in or responsibility for the River Lee Navigation's environs (see Section 2 Context & Section 3 Planning & Policy).

PARTNERSHIP

The Recommendations and Action Plan seek to bring together these diverse aspirations for the River Lee Navigation and provide a practical means of taking them forward through site specific recommendations. It is hoped that this study will facilitate partnership between the public, private and voluntary sectors and help in the planning of resources as well as the division of responsibilities to implement the proposals.

CATEGORIES OF IMPROVEMENT

The recommendations have been divided into 5 categories of improvement, each of which derives from one of the aims. Each category of improvement is sub-divided into a series of recommendations, which are identified on one map showing the whole study length. This enables the type of improvement proposed under each category for the whole study length to be seen at a glance, whilst a description of the works required / proposed at a specific site are given in the text on the following pages. All the recommendations identified within this section are included in the Action Plan (Section 9) which includes details of potential partners, timescales and costs.

7.2 LANDSCAPE

Improvements to enhance the local environment = both built and natural;

- Aquatic Planting
- Boundary Improvements
- Graffiti Treatment
- Heritage Feature Improvements
- Landscape & Habitat Creation
- Landscape & Habitat Improvements
- Public Art

7.3 COMMUNITY & VISITOR FACILITIES

Developing the river's recreation potential;

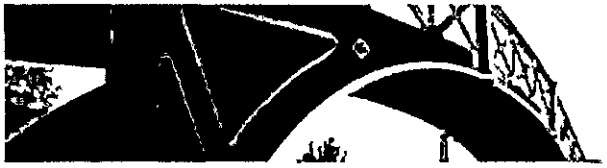
- Café / Picnic Area
- Community Boat / Floating Classroom
- Interpretation
- New Or Improved Moorings
- New Waterside Based Leisure Facilities
- Restaurant Boat
- Sports / Leisure Facility Improvements
- Trip Boat

7.4 COMMUNITY SAFETY

Reducing fear of crime and improving community safety,

- Guardians On The Waterway
- Hidden Corner Improvements
- Structure Lighting
- Windows Onto The Waterway

7.5 ACCESS IMPROVEMENTS



Improvements for access for all users,

- Access Point Improvements
- New Access Points
- Signage
- Towpath Improvements

7.6 SUSTAINABILITY

Contributions to sustainability issues including transport and waste transfer,

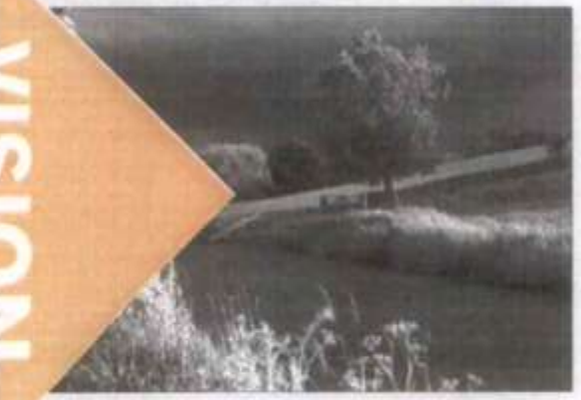
- Commuter Route
- Litter Removal / Pollution Control
- River Taxi
- Waste By Water

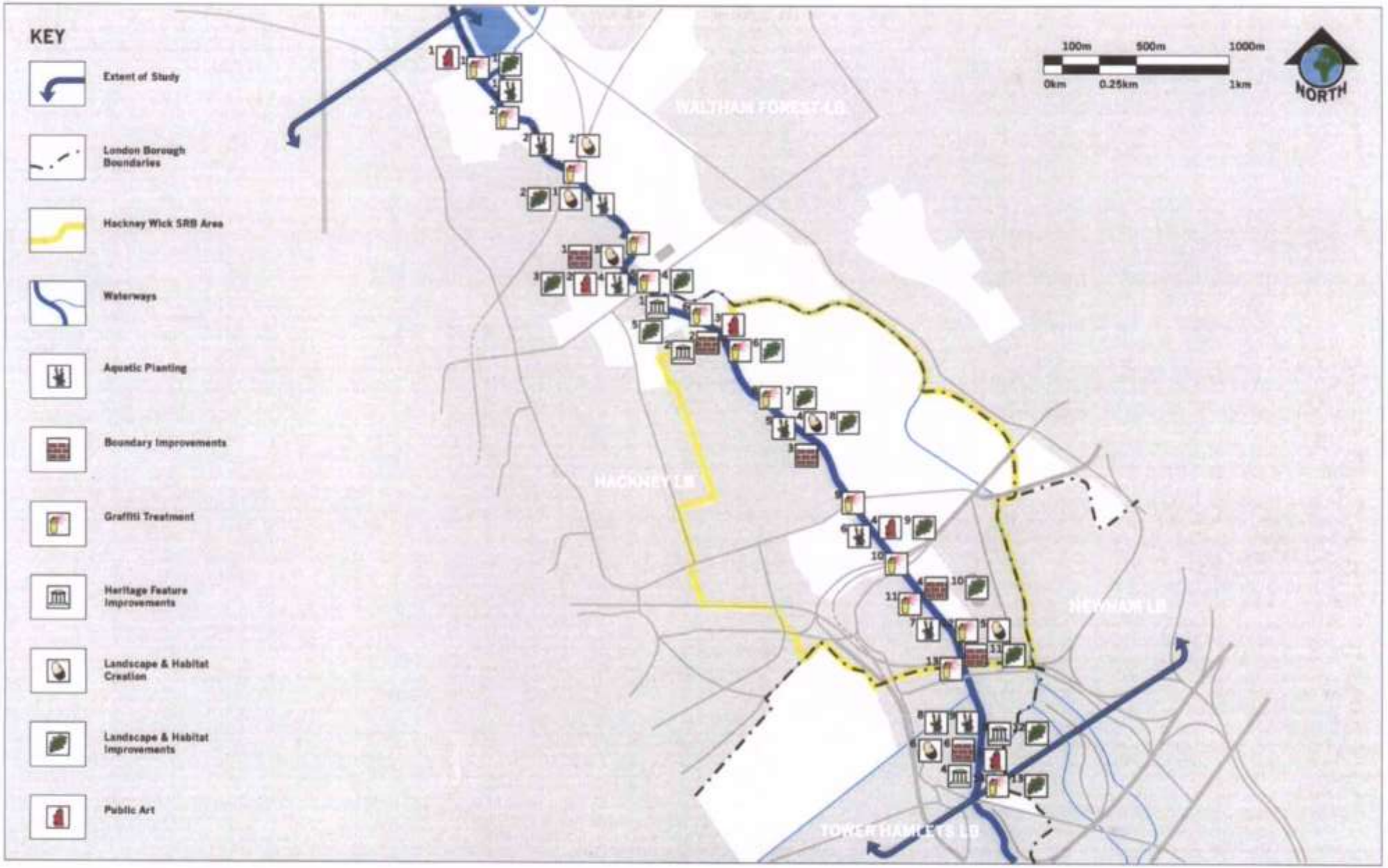
IMPROVEMENTS TO ENHANCE THE LOCAL ENVIRONMENT - BOTH BUILT AND NATURAL

PROPOSED PLAN

- AQUATIC PLANTING
- BOUNDARY IMPROVEMENTS
- GRAFFITI TREATMENT
- HERITAGE FEATURE IMPROVEMENTS
- LANDSCAPE & HABITAT CREATION
- LANDSCAPE & HABITAT IMPROVEMENTS
- PUBLIC ART

VISION




KEY
Extent of Study
London Borough Boundaries
Hackney Wick SRB Area
Waterways
Aquatic Planting
Boundary Improvements
Graffiti Treatment
Heritage Feature Improvements
Landscape & Habitat Creation
Landscape & Habitat Improvements
Public Art
100m
500m
1000m
0km
0.25km
1km
NORTH
WALTHAM FOREST LB
HACKNEY LB
NEWHAM LB
TOWER HAMLETS LB

7 RECOMMENDATIONS

AQUATIC PLANTING

1 Vertical, hard bank protection restricting the opportunity for emergent vegetation to become established. Collaborate to create emergent planting opportunities along this section – Springhill to Horse Shoe Bridge.

2. Retain and extend areas of native aquatic and emergent
3 vegetation through appropriate management and planting schemes

4. Extend existing areas of emergent vegetation and seek to
5 create new areas of emergent vegetation in suitable areas, eg where the channel widens.

6. Survey the submerged aquatic vegetation and manage
7. accordingly

8. Encourage damselflies and water birds by creating suitable habitats.

9. Seek to create new areas of emergent vegetation in suitable areas

BOUNDARY IMPROVEMENTS

1. An attractive and sensitively designed brick wall to be built around Middlesex Wharf It will link into the existing brick wall and replace the unsightly wooden boarded security fence.

2. The riverside strip along the boundary with the former CEGB Power Station site should be imaginatively landscaped as a riverside promenade linking Hackney Marsh with South Millfields Recreation Ground If the former power station site remains in use as a refuse collection site then some sort of screening should be incorporated along the boundary between the former power station site and the riverside promenade

3. The offside river edge piling along this stretch is in a state of disrepair. It needs repairing and tidying up.

4. Timber bollards should be installed as the boundary markers between the towpath and Arena Fields rather than the existing hit and miss metal fencing and trip rails to create a more open and manageable interface between the two areas.

5. To the south of Arena Fields along the towpath boundary there is an unsightly breeze block wall which could be painted and possible used for a mural or even demolished and replaced with a brick wall to match the buildings on the offside.

6. The frontages to the warehouses on the offside of this stretch are very uninspiring and do not make use of their riverside location. The warehouse owners should be encouraged to use their available strips of land next to the river as riverside open space where their workforce can go and sit outside during breaks. This would increase surveillance along this more enclosed stretch of the river.

GRAFFITI TREATMENT

1. The footbridge between Springfield Marina and Springfield Park is suffering from some graffiti damage on the brickwork. It is recommended that this is cleaned off and at the same time, the metal structure of the bridge is repainted.

2. Horse Shoe Bridge has some graffiti damage on the brickwork. It is recommended that this is cleaned off and at the same time, the metal structure of the bridge is repainted

3. The viaduct is covered in places with graffiti which needs to be cleaned off.

4. Middlesex Wharf Footbridge is suffering from some graffiti damage on its stonework and metalwork. It is recommended that the stonework is cleaned and the metalwork is repainted.

5. Lea Bridge has some graffiti damage on its brickwork and metalwork. It is recommended that the graffiti is cleaned off.

6 The brick pillars at the entrance to the Middlesex Filter Beds Nature Reserve are covered in graffiti which needs cleaning off.

7. Cow Bridge has some graffiti damage on its concrete walling Depending on the future of the bridge, as at present it is shut off to vehicular traffic due to structural fears, it is recommended that the graffiti is cleaned off and a painting scheme is looked at for the bridge.

8. The footbridge at this location is covered in graffiti It is recommended that the whole of the concrete and brickwork on the bridge is cleaned to remove the graffiti and rust stains.

9. Marshgate Bridge only has a small amount of graffiti on its brick and stonework but this should still be cleaned off.

10. The A102(M) underpass is suffering quite badly from graffiti damage on its concrete walling and pillars In conjunction with Recommendation 2 under Sports / Leisure Facility Improvements (Section 7.3) for a BMX / Roller Blading adventure arena, it is recommended that a local community artist works with the local youth groups in creating a series of murals for the concrete walling and pillars

11. The enclosed concrete footbridge between Gainsborough Primary School and Arena Fields is, at its base, suffering from a lot of graffiti damage. At present this bridge is locked and disused. With this in mind, it would be better to look at the bridge's viability rather than waste money cleaning it up.

12 To the south of Arena Fields along the towpath boundary there is an unsightly breeze block wall which has some graffiti damage. In conjunction with Recommendation 5 under Boundary Improvements (Section 7.2) for a painting scheme on this wall or a new wall, it is recommended that the little graffiti there is, is left until the wall's future is determined

13 The Hackney Wick Railway Bridge is very badly covered in graffiti. It is recommended that the brickwork is cleaned up and that the metalwork is repainted. Also Carpenters Road Bridge is suffering from some graffiti damage. It is recommended that the graffiti on the concrete, brickwork and metalwork is cleaned off.

14. At Old Ford Locks the metalwork on the locks, bridges and railings is suffering from graffiti damage. It is recommended that as a face lift for the locks, all the metalwork on all the associated structures is repainted.

HERITAGE FEATURE IMPROVEMENTS

1 The old pair of stop gates at Lea Bridge are starting to get vegetation growing in their stonework as well as grass growing amongst the stone setts As part of ongoing

management of this feature, the vegetation needs to be removed as soon as possible Also between the stop gates and Lea Bridge there is an old iron towpath bridge which is now the only indicator of an old wharf. In the future it would be good to look at the viability of opening the wharf up again to some degree.

2. To many the old CEGB Power Station is an eyesore and blight on the landscape. It is worth considering though that many such buildings around the country have been transformed into major attractions One such building, but on a much larger scale is the former Battersea Power Station which is now home to the Tate Modern on the banks of the River Thames This building has a beautiful setting on the banks of the river and thus a prime location for new waterside based leisure facilities. In the future of this site it is worth considering this building as a heritage feature / community landmark!

3 Between the junction with the Hertford Union Canal and Old Ford Locks lie three raised platforms in the towpath where trains once loaded and unloaded their goods onto and off the barges. These insights into the canal's working past need to be maintained in their present good condition for all to appreciate.

4. Old Ford Locks is the only lock along this stretch and provides quite a focal point with the navigation rejoining the Old River Lea, the surrounding old warehouses and the not so historical Big Breakfast TV Studio. It is proposed that the landscaping and historical structure of the locks is enhanced and promoted as a focal point along the corridor.

LANDSCAPE & HABITAT CREATION

1 Collaborate to undertake terrestrial planting in order to make the west side walk more aesthetically pleasing

2 Encourage vegetation (eg ivy) on viaduct walls which will increase bird and invertebrate habitat whilst deterring graffiti

3. Plant vegetation (eg ivy) on towpath boundary walls to
5 improve the visual quality of the area and provide habitat for birds and invertebrates

4. Investigate the opportunities to create grassland and wetland habitat on suitable areas of Hackney Marsh in order to widen the wetland corridor

6. Liaise with offside industry to encourage suitable offside planting (eg ivy) on the bare walls.

LANDSCAPE & HABITAT IMPROVEMENTS

1 Survey Horse Shoe Island in Springfield Marina and manage accordingly, with the aim to maximise benefit for wildlife, eg if suitable put up bird and bat boxes

2 Seek to undertake effective control of the alien giant hogweed and floating pennywort before they expand further.

3. Collaborate to improve the diversity of towpath verges and thereby improve the visual impact of the area

4. Survey the offside area of soft bank at Essex & Eastwood Wharf and South Millfields for mammals and manage accordingly, with the aim to maximise benefit for wildlife

5. Seek to undertake effective control of the alien giant hogweed, floating pennywort and Japanese knotweed before they expand further.

6. Collaborate to undertake management of areas of South Millfields next to the riverbank for the benefit of wildlife, thereby widening the navigation corridor.

7. Seek to undertake effective control of the Japanese knotweed and duckweed before they expand further

8 Collaborate to investigate the feasibility of enhancing for the benefit of wildlife, the grassland of Hackney Marsh adjacent to the Lee Navigation.

9 Seek to undertake effective control of the Japanese knotweed, duckweed and algae before they expand further.

10. Through partnership, review the management of Arena Field and implement methods to enhance the biodiversity of the area where appropriate

11 Increase diversity of verges adjacent to the industrial parks
12. by reviewing the towpath management regimes and adopting a method of practice to promote floristic diversity.

13. Collaborate on methods of increasing the biodiversity in the area especially linking in with Old Ford Nature Reserve and the Greenway.

PUBLIC ART

1. There is considerable scope for the use of public art to
2 raise the profile of the navigation, to announce the river's
3. presence from key roads and help to create more inviting
4. entrances to the river corridor. Such key focal points
5. would include Springfield Park / Springfield Marina, Lea Bridge Road / Millfields Recreation Ground, Cow Bridge Changing Rooms, Marshgate Bridge / Wick Woodland / Gainsborough Road Bridge and Old Ford Locks.

Interpretation and signage could be integrated as part of a public art programme serving as gateway markers to the navigation. The markers should be robust designs which are vandal resistant and preferably placed at points that are inaccessible. See Recommendations 1-10, Interpretation (Section 7.3) and Recommendations 1-10, Signage (Section 7.5).

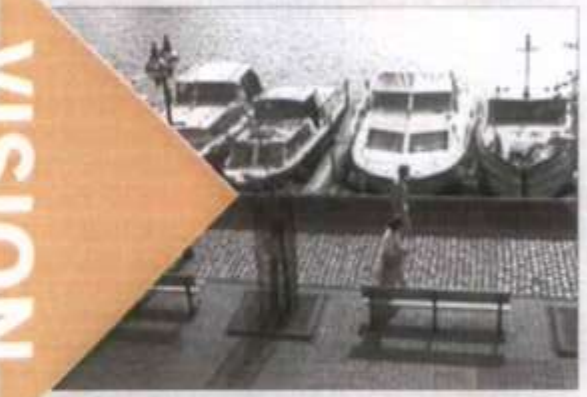
PROJECT AIM

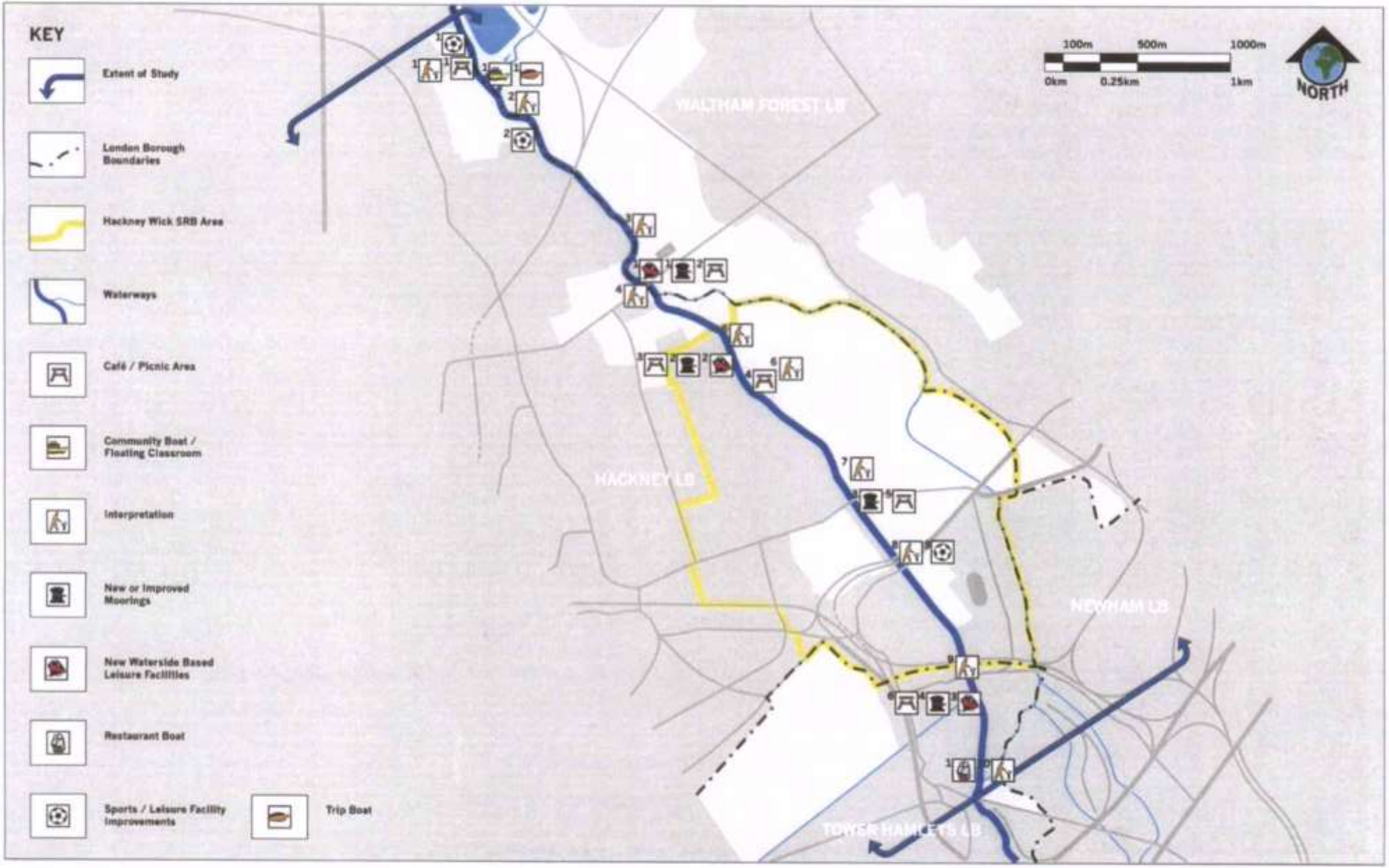
DEVELOPING THE RIVER'S RECREATIONAL POTENTIAL

RECOMMENDATIONS

- CAFÉ / PICNIC AREA
- COMMUNITY BOAT / FLOATING CLASSROOM
- INTERPRETATION
- NEW OR IMPROVED MOORINGS
- NEW WATERSIDE BASED LEISURE FACILITIES
- RESTAURANT BOAT
- SPORTS / LEISURE FACILITY IMPROVEMENTS
- TRIP BOAT

VISION




KEY
Extent of Study
London Borough Boundaries
Hackney Wick SRB Area
Waterways
Café / Picnic Area
Community Boat / Floating Classroom
Interpretation
New or Improved Moorings
New Waterside Based Leisure Facilities
Restaurant Boat
Sports / Leisure Facility Improvements
Trip Boat
100m
500m
1000m
0km
0.25km
1km
NORTH
WALTHAM FOREST LB
HACKNEY LB
NEWHAM LB
TOWER HAMLETS LB

CAFÉ / PICNIC AREA

CAFÉ / PICNIC AREA

1. There is an existing café at Springhill but the upgrading and modernisation of this facility would be of benefit to all at this strategic focal point.

2. In conjunction with Recommendation 1 - New Waterside Based Leisure Facilities (Section 7.3) for a new waterside focal point and visitor attraction at Essex and Eastwood Wharf, a new café would be of great value as part of this development within the bend of the river overlooking North Millfields Recreation Ground.

3. In conjunction with Recommendation 2 – New Waterside Based Leisure Facilities (Section 7.3) for a waterside focal point and visitor attraction on the former CEGB Power Station site, a new café would be of great value as part of this development.

4. There is an existing picnic area at Cow Bridge changing rooms but the upgrading and enhancement of this facility would be of benefit to all at this strategic location in the Hackney Marshes and it will lie next to the Lee Valley Pathway when completed.

5. Marshgate Bridge acts as a strategic entrance point to both Hackney Marshes and Wick Woodland, yet the visitor facilities at this location are non-existent. In conjunction with Recommendation 10 - Access Point Improvements (Section 7.5) for the upgrading of this access point, a picnic area at this location could become very popular. It will lie next to the Lee Valley Pathway, next to a major access point and will be situated within some wonderful parkland.

6. In conjunction with Recommendation 3 – New Waterside Based Leisure Facilities (Section 7.3) for a waterside focal point and visitor attraction on the junction with the Hertford Union Canal, a new café would be of great value as part of this development

COMMUNITY BOAT / FLOATING CLASSROOM

1. A community narrowboat / floating classroom to serve this stretch of the canal would be beneficial to all. This could be used for education purposes linked with the local schools and youth groups, as well as for promotion to engender business support for the river environment. The Lower Lea Project already work with local communities on the river with their boat the 'Pride of Lee'. With such a resource at hand it would only be sensible to liase with the Lower Lea Project and discuss how their services could possibly be widened.

INTERPRETATION

1. There is very little interpretation along this stretch of the
2. River Lee Navigation, with what little there is either on the
3. whole out of date or graffiti damaged. In conjunction with
4. Recommendations 1-5 – Public Art (Section 7.2) for new
5. public art schemes and Recommendations 1-10 – Signage
6. (Section 7.5) – Interpretation, Signage and Public Art
7. could all be integrated as one programme serving as
8. gateway markers to the river corridor.
9.
10. The interpretative information should always include present location, context map, points of interest and relevant factual information (eg History, Wildlife, Ecology, Local Interest etc). The key locations for interpretative information are Springhill / Springfield Park, Horse Shoe Bridge, Middlesex Wharf Footbridge, Lea Bridge, Friends Bridge / Middlesex Filter Beds Nature Reserve, Cow Bridge, Marshgate Bridge, Gainsborough Road Bridge, Carpenters Road Bridge and Old Ford Locks.

    The project should include off-site interpretation of the river corridor from Hackney Wick Station and Clapton Station, with a trail leading the visitor to the waterway. This could comprise an artwork motif, eg of a narrowboat, set into the pavement or boundary walls on the route from the stations.

NEW OR IMPROVED MOORINGS

1. In conjunction with Recommendation 1 – New Waterside Based Leisure Facilities (Section 7.3) for a new waterside focal point and visitor attraction at Essex and Eastwood Wharf, it is recommended that as part of this development new visitor moorings should be considered.

2. In conjunction with Recommendation 2 – New Waterside Based Leisure Facilities (Section 7.3) for a new waterside focal point or Recommendation 1 – Waste by Water (Section 7.6) for a waste transfer site on the former CEGB

Power Station Site, it is recommended that new improved mooring facilities are integrated into the new development either as visitor moorings or mooring point for the waste transfer boats.

3. In conjunction with Recommendation 5 – Café / Picnic Area (Section 7.3) for a new picnic area, it is recommended that informal visitor moorings are located at this site.

4. In conjunction with Recommendation 3 – New Waterside Based Leisure Facilities (Section 7.3) for a water based leisure facility, it is recommended that new visitor / residential moorings are included as part of the development.

NEW WATERSIDE BASED LEISURE FACILITIES

1. An attractive and sensitively designed waterside leisure facility at Essex and Eastwood Wharf to be developed as a new focal point and visitor attraction with the decontamination and opening up of the infilled oxbow immediately to the north to create a new waterside location for recreational use. See also Recommendation 1 – New or Improved Moorings (Section 7.3) for new visitor moorings and Recommendation 2 – Café / Picnic Area (Section 7.3) for a new café, both for this location.

2. An attractive and sensitively designed waterside leisure facility on the former CEGB Power Station site to be developed as a new focal point and visitor attraction being integrated with Cow Bridge and South Millfields Recreation Ground. The old power station itself should seriously be considered as a focal point to this development. For an alternative use for this site, see Recommendation 1 – Waste by Water (Section 7.6) for a waste transfer site. In connection with this development, see also Recommendation 2 – New or Improved Moorings (Section 7.3) for new and improved visitor or waste transfer moorings and Recommendation 3 – Café / Picnic Area (Section 7.3) for a new café.

3. An attractive and sensitively designed waterside leisure facility on the junction of the Hertford Union and the River Lee Navigation to be developed as a new focal point and visitor attraction. See also Recommendation 4 – New or Improved Moorings (Section 7.3) for new visitor / residential moorings and Recommendation 6 – Café / Picnic Area (Section 7.3) for a new café, both for this location.

RESTAURANT BOAT

1. In conjunction with Recommendation 4 – Heritage Feature Improvements (Section 7.2) for the enhancement and promotion of Old Ford Locks as a waterway focal point, it is recommended that a restaurant boat could be based on the offside of the locks.

SPORTS / LEISURE FACILITY IMPROVEMENTS

1. The upgrading and modernisation of recreational and
2. water based facilities at Springhill and Leaside to be supported where these increase the level of participation and where they are sensitively designed and located to minimise impact on the landscape and ecological interest of the area.

3. The underpass beneath the A102(M) could be developed as a skate park, with the lack of such facilities in the area. Any such development should be made in close consultation with the local youth clubs.

TRIP BOAT

1. With ongoing redevelopment of the Lee Valley and rising profile as one of the major green lungs of London, more visitors can be expected in the future, giving rise to the increased need for river trips. Already in existence is the 'Pride of Lee' trip boat run by the Lower Lea Project. It would have to be investigated to see if this service could cater for an increased need for trips up and down this stretch of the River Lee or whether a new trip boat would have to be considered, possibly based at Springfield Marina.

NEW WATERSIDE BASED LEISURE FACILITIES

PROJECT AIM

REDUCING THE FEAR OF CRIME AND IMPROVING COMMUNITY SAFETY

RECOMMENDATIONS

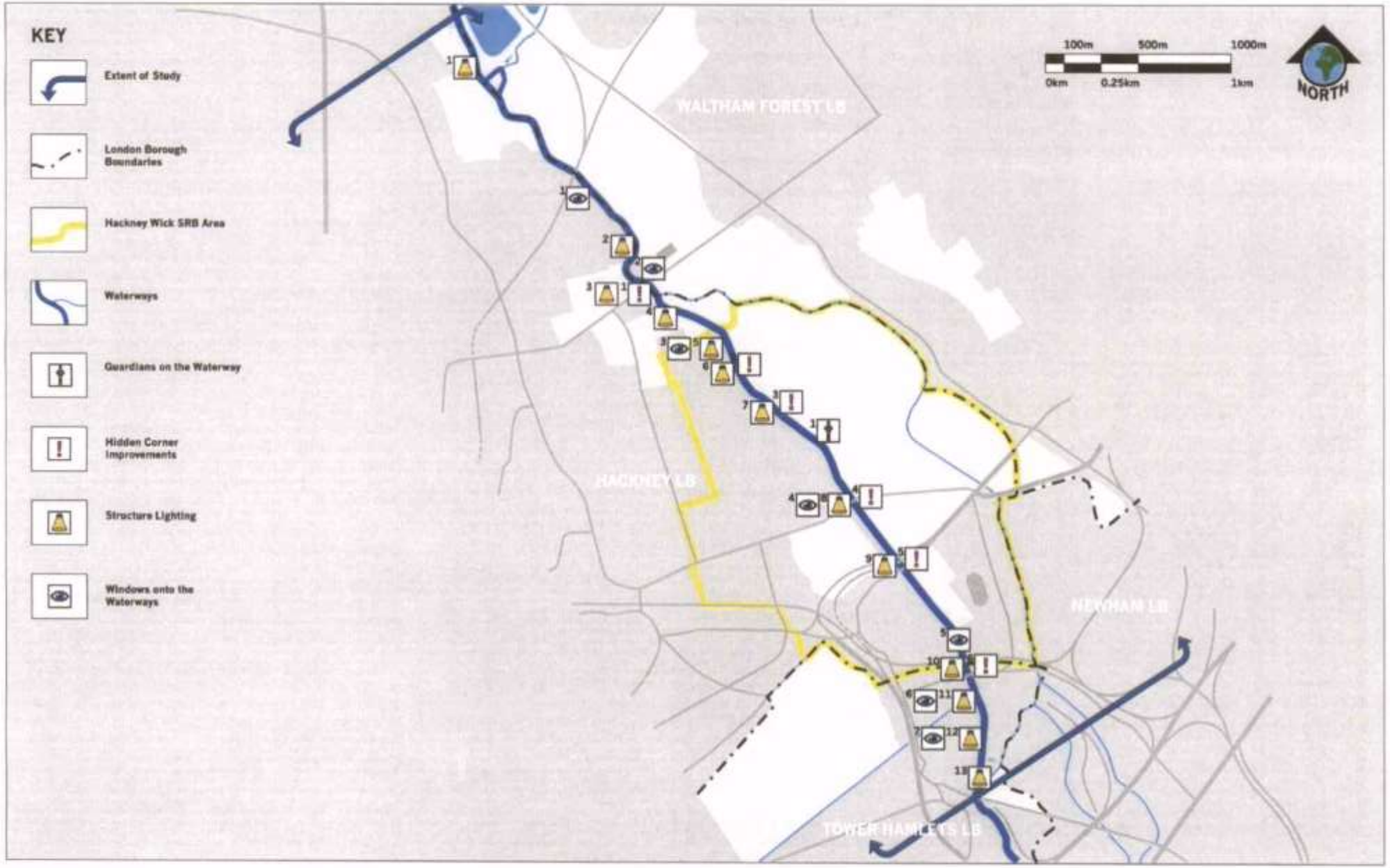
GUARDIANS ON THE WATERWAY

HIDDEN CORNER IMPROVEMENTS

STRUCTURE LIGHTING

WINDOWS ONTO THE WATERWAY

VISION


KEY
Extent of Study
London Borough Boundaries
Hackney Wick SRB Area
Waterways
Guardians on the Waterway
Hidden Corner Improvements
Structure Lighting
Windows onto the Waterways
100m
500m
1000m
0km
0.25km
1km
NORTH
WALTHAM FOREST LB
HACKNEY LB
NEWHAM LB
TOWER HAMLETS LB

STRUCTURE LIGHTING

GUARDIANS ON THE WATERWAY

1. A Canal Ranger for this stretch of the River Lee Navigation would provide a port of call for the local community regarding any canal matters, an educational resource for the local community and of course a pair of ears and eyes known to be patrolling the canal.

   In connection with this, a scheme to have 'lollipop type' wardens on the canal during the times for travel to and from school would provide a safe and fun commuter route for school children. These might be provided through a parents' volunteer rota or as a paid part-time post or possible as part of a Canal Ranger's duties. The validity and need for such a scheme would first have to be checked out in close consultation with local schools.

HIDDEN CORNER IMPROVEMENTS

1. Lea Bridge, Cow Bridge, Daubeney Road Footbridge,
2. Marshgate Bridge, A102(M) Road Bridge, Gainsborough
3. Road Bridge, Hackney Wick Railway Bridge and
4. Carpenter's Road Bridge all have blind spots / hidden
5. corners where potentially an undesirable can lurk
6. unnoticed. These hidden corners are one factor in the local communities perceived fear of crime. They should be eliminated through new landscape design schemes, thus stopping an undesirable from lurking unnoticed and hopefully reducing the fear of crime along this stretch.

STRUCTURE LIGHTING

1. Dark enclosed spaces lead to a fear of crime, which is
3. presented along this stretch of the River Lee Navigation by
6. pedestrians having to walk beneath bridges at night. This
7. can be tackled by installing lighting on the underneath of
8. Springhill Footbridge, Lea Bridge, Cow Bridge, Daubeney
9. Footbridge, Marshgate Bridge, A102(M) Road Bridge,
10. Gainsborough Road Bridge, Hackney Wick Railway
11. Bridge, Carpenter's Road Bridge and the proposed footbridge across the Hertford Union Canal.

2. To improve on surveillance and security, every
4. opportunity should be taken to light the waterside from
5. adjoining premises, or existing structures in areas of
12. potential high use. This can take the form of actually
13. lighting the façades of existing structures which can make walkways appear safer and more secure, as well as creating focal points along the waterway. This could be done on the warehouses in Middlesex Wharf, the former pair of stop gates, the former CEGB Power Station, the offside warehouses south of the Hertford Union Canal and Old Ford Locks.

WINDOWS ONTO THE WATERWAY

1. It has been British Waterways' experience that the most successful and safe waterside developments overlook the waterway providing natural surveillance and policing. The industry in Ziam Industrial Estate & Leeside Wharf on the offside all have their backs to the waterway with no surveillance at all over the Lee. It would be beneficial to collaborate with these industries to influence any future redevelopment plans into considering facing the waterway.

2. In conjunction with Recommendation 1 – New Waterside Based Leisure Facilities (Section 7.3) for a new waterside focal point and visitor attraction at Essex and Eastwood Wharf, it is recommended that through the planning process British Waterways seek to obtain a development which fronts the navigation with buildings and spaces overlooking the waterway providing natural surveillance and policing.

3. In conjunction with Recommendation 2 – New Waterside Based Leisure Facilities (Section 7.3) for a new waterside focal point on the former CEGB Power Station site, it is recommended that through the planning process British Waterways seek to obtain a development which fronts the navigation with buildings and spaces overlooking the waterway providing natural surveillance and policing.

4. There is a lot of industry along the southern part of this
5. stretch of the River Lee Navigation. Unfortunately these
7. industrial developments have created a negative approach to the River Lee Navigation by on the whole placing their backs along the river. Service Yards, storage areas etc, are often situated on the riverside together with security fencing and walls. It is important that over the long term change is sought to get these industries to front the waterway providing natural surveillance and policing as well as a more aesthetic view. It is recognised that industrial developments on the towpath will more often than not still need a security barrier. A permeable attractive fence allowing surveillance can still be an

effective security measure. All this needs to be sought through close consultation with the industries on future planning, design and management issues.

6. In conjunction with Recommendation 3 – New Waterside Based Leisure Facilities (Section 7.3) for a waterside focal point on the junction of the Hertford Union and the River Lee Navigation, it is recommended that through the planning process British Waterways seek to obtain a development which fronts the navigation with buildings and spaces overlooking the waterway providing natural surveillance and policing.

WINDOWS ONTO THE WATERWAY

PROJECT AIM

IMPROVEMENTS FOR ACCESS FOR ALL USERS

RECOMMENDATIONS

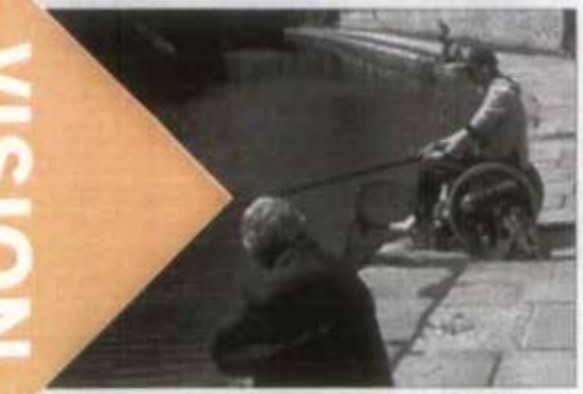
ACCESS POINT IMPROVEMENTS

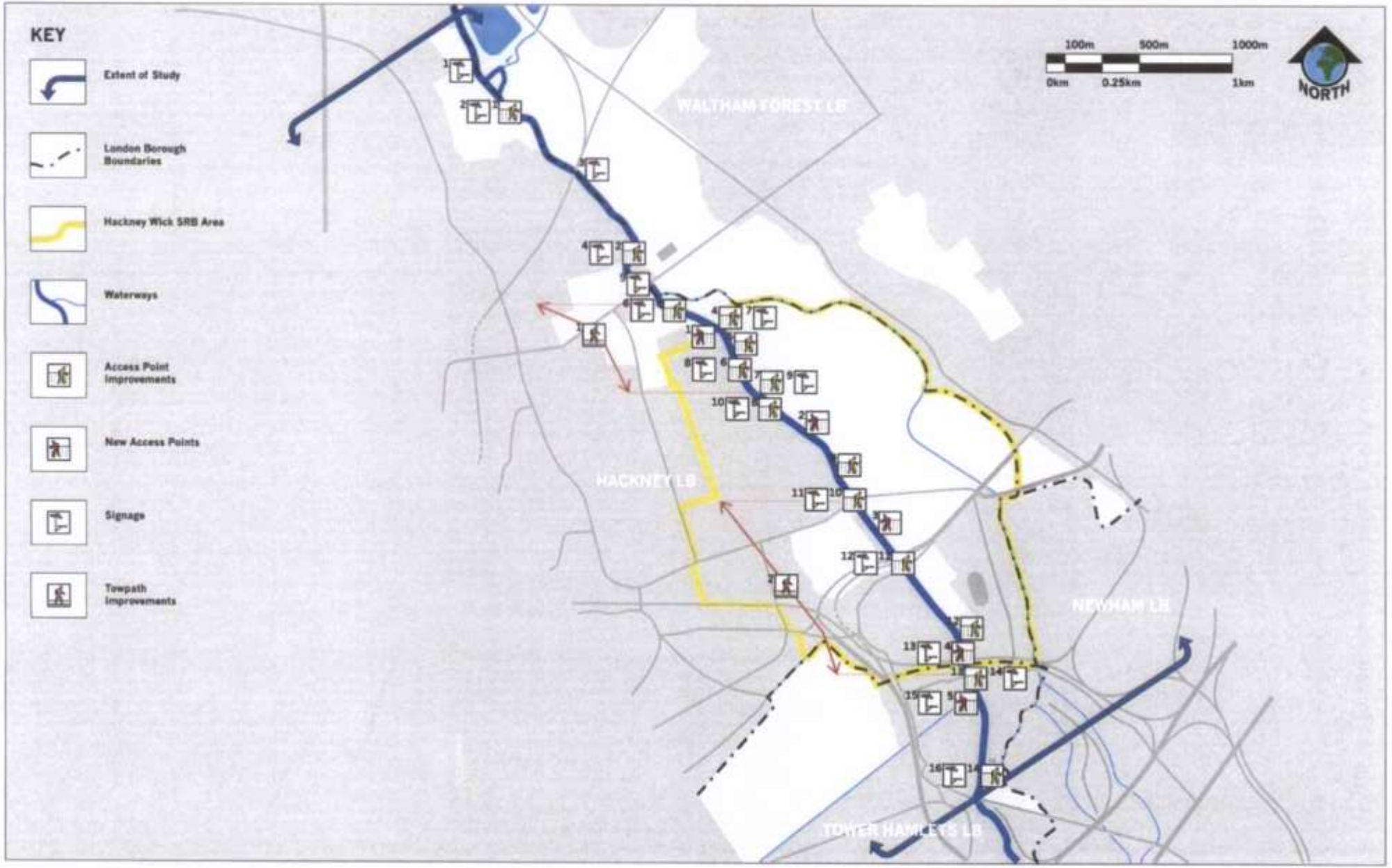
NEW ACCESS POINTS

SIGNAGE

TOWPATH IMPROVEMENTS

VISION

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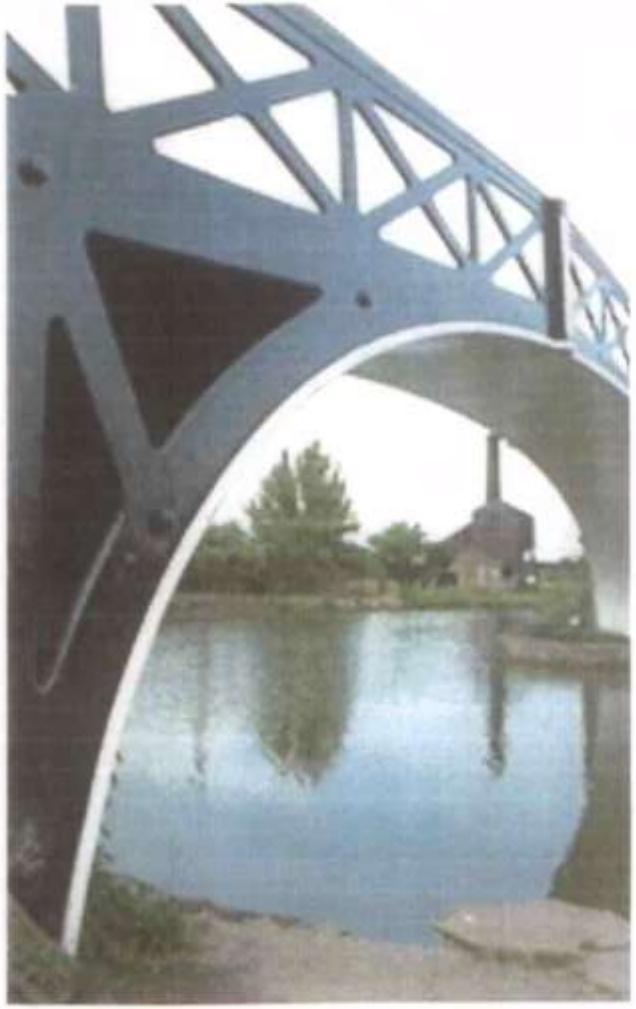
TOWER HAMLETS LB

NEW ACCESS POINTS



ACCESS POINT IMPROVEMENTS

1. This stretch of the River Lee Navigation has a very high proportion of cross towpath and access to the towpath barriers. The main purpose of these barriers is the prevention of motorcycles from entering the towpath. Unfortunately the majority of these barriers also significantly disadvantage access to other legitimate towpath users, namely the disabled, cyclists, parents with buggies etc. In view of this it is strongly recommended that all of these barriers are looked at to assess their validity / usefulness, with the redundant ones removed and the others replaced with a common design which caters for the legitimate towpath users who are presently disadvantaged by the existing barriers.

5. This access point to the towpath from Hackney Marsh Changing Room Car Park presently necessitates the user to walk up or down a grassy embankment, which can get slippy or overgrown. Steps need to be put in between the towpath and the top of the embankment to provide safe access.

6. Cow Bridge is presently closed off to vehicular traffic, but still allows pedestrian access. This leaves the Hackney Marsh Changing Rooms fairly redundant, with its car park slowly becoming overgrown with no vehicular use. The future of this access point needs looking into as to whether vehicular access is considered a viable future option or whether this point will now only be a pedestrian access point and action taken accordingly.

10. Marshgate Bridge should be seen as a key focal point entrance to the navigation with Hackney Marsh and Wick Woodland all lying adjacent to this point and upgraded / improved in view of this.

11. Gainsborough Road Bridge entrance to the navigation should be upgraded / improved to take into account its strategic location with links to Wick Woodland and Arena Field / Hackney Stadium.

12. Presently between Arena Field and the East Cross Centre there is an informal access route from the towpath to Hackney Stadium. This route should be looked at for improvements especially if Recommendation 4 – New Access Points (Section 7.5) for a new pedestrian link between Hackney Wick Station and the towpath comes about, meaning that the access route from the station to the stadium would follow this present route.

13. Carpenters Road Bridge should be seen as a key focal point entrance to the navigation with its present links to Hackney Wick Station, Hackney Stadium and the Hertford Union Canal and upgraded / improved in view of this.

14. Old Ford Locks should be seen as a major key focal point entrance to the navigation with its present links to the Big Breakfast TV Studio, the Greenway and the Old River Lea, and upgraded / improved in view of this.

NEW ACCESS POINTS

1. Presently there is a cycle and pedestrian path on the offside going from Cow Bridge to South Millfields. Unfortunately this path stops dead when it reaches South Millfields and there is then no access path across South Millfields to join up with an existing cycle / pedestrian path travelling east / west across South Millfields. The instatement of this link would join together the existing path network and not leave one path going nowhere.

2. Between the towpath and Hackney Marsh there is a fence with very few access points between the two. In places there has been vandalism, knocking down the fence, thus allowing free access between them. In view of this, one or two new access points should be instated between the towpath and Hackney Marsh.

3. Between Marshgate Bridge and the A102(M) Road Bridge there is no access between the towpath and Wick Woodland. It would make sense to provide a link between the towpath and the central ride running through the middle of Wick Woodland.

4. Presently there is no direct link to the towpath from Hackney Wick Station. This would be quite feasible through a new pedestrian bridge leading from the end of the platform over the navigation to the towpath. In conjunction with Recommendation 12 – Access Point Improvements (Section 7.5) for a link between the towpath and Hackney Stadium, this proposed pedestrian bridge would provide an important link between the station and the stadium.

5. In conjunction with Recommendation 3 – New Waterside Based Leisure Facilities (Section 7.3) for a new focal point and visitor attraction on the junction of the Hertford Union Canal and the River Lee Navigation, there would

have to be a link between this and the navigations. To achieve this, a pedestrian bridge would have to be built, preferably across the Hertford Union Canal to the towpath.

SIGNAGE

1. Signage is virtually nonexistent along this stretch of the
2. River Lee Navigation, with what little there is mainly
3. found on the Walthamstow Marshes. In conjunction with
4. Recommendations 1-5 – Public Art (Section 7.2) for new
5. public art schemes and Recommendations 1-10 –
6. Interpretation (Section 7.3) for interpretative schemes,
7. Interpretation, Public Art and Signage could all be
8. integrated as one programme serving as gateway markers
9. to the river corridor.
10.
11. The directional signage will need to be placed at all
12. entrance points to the navigation (next to the canal
13. towpath and at road / street level). Each sign will need to
14. state the walking distance to the next access / exit point
15. and any points of interest.
16.

The key locations for directional signage are Springhill / Springfield Park, Horse Shoe Bridge, Walthamstow Marshes Viaduct, Middlesex Wharf Footbridge, Lea Bridge, South Millfields, Friends Bridge / Middlesex Filter Beds Nature Reserve, Cow Bridge, Hackney Marsh Changing Rooms, Hackney Marsh Footbridge, Marshgate Bridge, Gainsborough Road Bridge, Hackney Wick Station Footbridge (proposed), Carpenter's Road Bridge, Hertford Union Canal Footbridge (proposed) and Old Ford Locks.

1. There are no bridge names on any of the bridges crossing
2. the River Lee Navigation along this stretch. A scheme to
3. put name plaques on both sides of every bridge would be
4. very beneficial to boaters as well as the towpath users in
5. terms of orientation. In addition, the name of the road or
6. path crossing the bridge could also be incorporated. The
8. bridges along this stretch are Springfield Marina
10. Footbridge, Horse Shoe Bridge, Walthamstow Marshes
11. Viaduct, Middlesex Wharf Footbridge, Lea Bridge, Lee
12. Stopgates Footbridge, Cow Bridge, Hackney Marsh
13. Footbridge, Marshgate Bridge, A102(M) Road Bridge,
14. Gainsborough Road Bridge, Hackney Wick Railway
15. Bridge Footbridge, Carpenter's Road Bridge and Hertford Union Canal Footbridge (proposed).

TOWPATH IMPROVEMENTS

1. The towpath throughout this stretch of the River Lee
2. Navigation is made up of a collection of different surfaces. Unfortunately a vast amount facilitates a poor quality pedestrian surface. A towpath improvements scheme is proposed as a priority for two stretches along this route, to create a user friendly environment meeting 'Access For All' standards. The two stretches are from South Millfields to Hackney Marsh Changing Rooms and Marshgate Bridge to Carpenter's Road Bridge. Comprehensive resurfacing is required, in conjunction with rationalisation of the towpath delineation and width in order to both facilitate access and retain a sustainable grass strip.

TOWPATH IMPROVEMENTS

PROJECT AIM

CONTRIBUTIONS TO SUSTAINABILITY ISSUES INCLUDING TRANSPORT AND WASTE TRANSFER

RECOMMENDATIONS

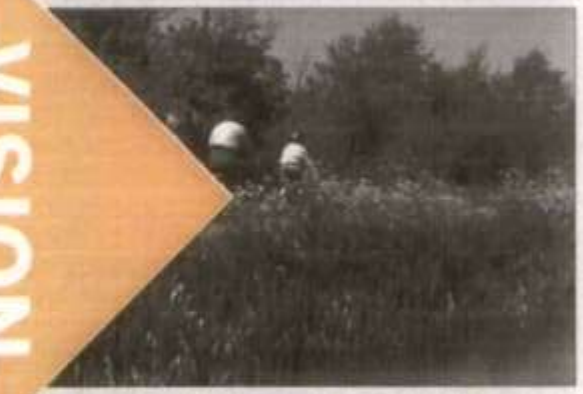
COMMUTER ROUTE

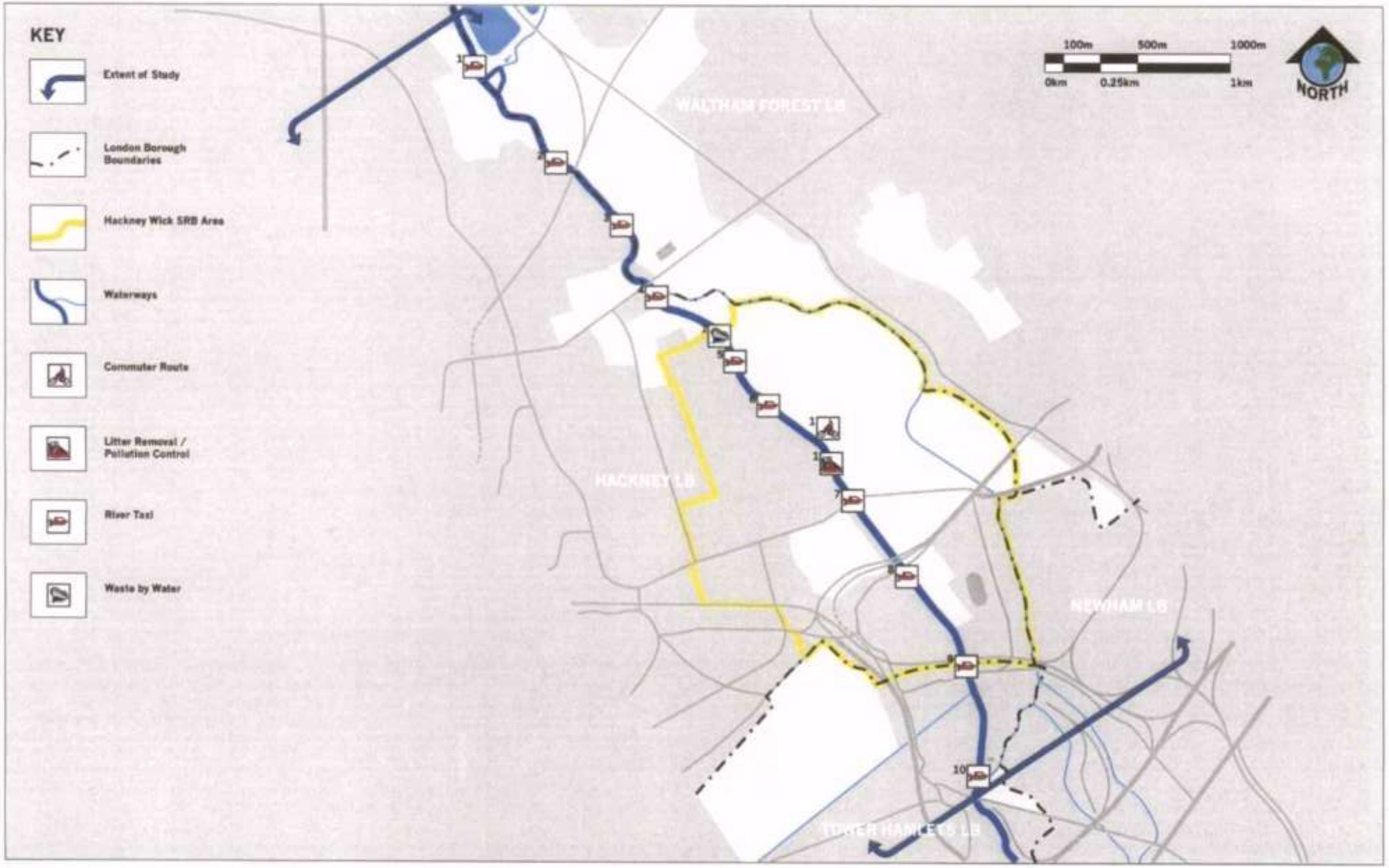
LITTER REMOVAL / POLLUTION CONTROL

RIVER TAXI

WASTE BY WATER

VISION




KEY
Extent of Study
London Borough Boundaries
Hackney Wick SRB Area
Waterways
Commuter Route
Litter Removal / Pollution Control
River Taxi
Waste by Water
100m
500m
1000m
0km
0.25km
1km
NORTH
WALTHAM FOREST LB
HACKNEY LB
NEWHAM LB
TOWER HAMLETS LB

COMMUTER ROUTE

COMMUTER ROUTE

1. In conjunction with Recommendations 1 & 2 – Towpath Improvements (Section 7.5) for two stretches of towpath to be improved, it is hoped in time that the towpath can be linked in with other local cycle / pedestrian routes to form a safe infrastructure of paths for travel to and from work or school. It is envisaged that this will be promoted through a leaflet, depicting accessible / safe routes through the area.

LITTER REMOVAL / POLLUTION CONTROL

1. Floating debris, litter accumulation and water pollution are a very big problem along this stretch of the River Lee Navigation. As a priority the existing management regimes for the cleaning of floating debris and litter need to be examined and a new management regime resourced. As part of this review the further promotion of community river clean up days needs looking into. The Lower Lea Project already carry out regular volunteer clean up days on the Lea.

   Water pollution can be tackled by pooling resources and promoting / furthering the 'Business Boundary' Campaign, and environmental training programme for waterway businesses run by the Lower Lea Project.

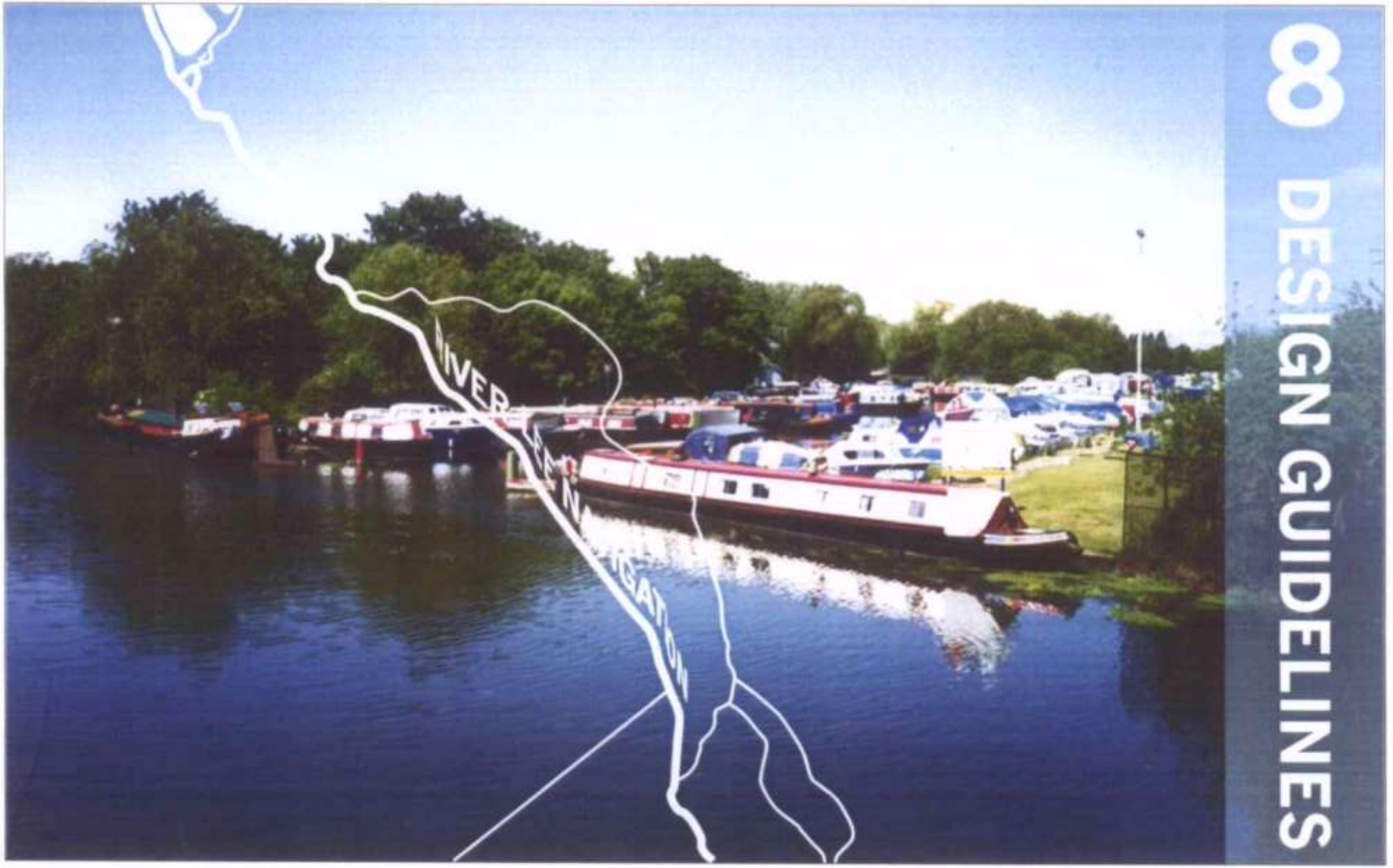
RIVER TAXI

1. With the possible higher profile and increased visitor
2. numbers to this area carrying on from the successful
3. implementation / promotion of the suggested projects /
4. schemes in this document, it can be envisaged that a river
5. taxi would be a very viable link up and down this part of
6. London, with no locks in the way to slow down travel. Of
7. course a study would have to be undertaken to evaluate
8. how well used such a facility would be, determining its
9. overall viability. Possible pick up points could be at
10. Springhill, High Hill Ferry, Leeside Wharf, Lea Bridge, Cow Bridge, Hackney Marsh Footbridge, Marshgate Bridge, Gainsborough Road Bridge, Carpenter's Road Bridge and Old Ford Locks.

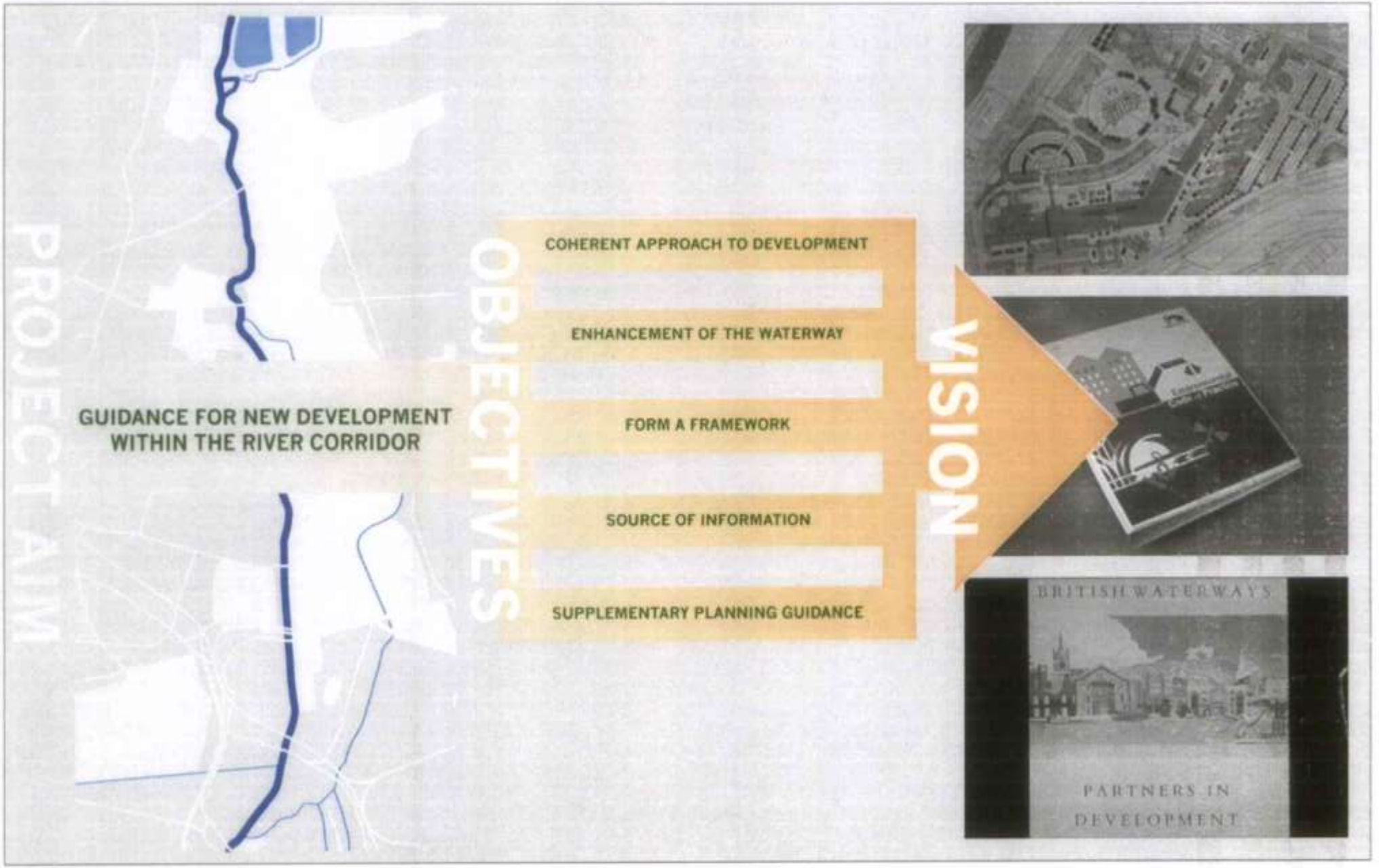
WASTE BY WATER

1. Waste by water is an initiative set up to move the transfer of waste off the roads and onto the water through special barges. There exists a council refuse collection site on the former CEGB Power Station site. If this use of the site is to stay then the viability of transferring waste to barges should be looked into. There are already mooring bollards on this site. There is a possibility that waste for recycling could be loaded onto the barges and transferred down river to London Recycling Ltd (who have an operations depot near Bromley-by-Bow) whose profits go to 'Trees for London' which presently accounts for 72 new trees per year.

LITTER REMOVAL / POLLUTION CONTROL



8 DESIGN GUIDELINES


PROJECT AIM
GUIDANCE FOR NEW DEVELOPMENT WITHIN THE RIVER CORRIDOR
OBJECTIVES
COHERENT APPROACH TO DEVELOPMENT
ENHANCEMENT OF THE WATERWAY
FORM A FRAMEWORK
SOURCE OF INFORMATION
SUPPLEMENTARY PLANNING GUIDANCE
VISION
BRITISH WATERWAYS
PARTNERS IN DEVELOPMENT

OBJECTIVES

- The aim of the guidelines is to foster a coherent approach to development and improvement within the visual envelope of the River Lee Navigation (ie anything that is visible from the navigation), whilst also encouraging high standards of design, site planning and approach to the environment.

- They also aim to form a framework for both negotiation, guide development control and assist in the rejuvenation of the river corridor.

- The guidelines are offered as supplementary planning guidance and are intended to help and assist developers (including existing landowners, statutory undertakers, public utilities, public authorities, and owners of industrial premises) and their agents, in preparing development and improvement schemes.

- The Partners are committed to the enhancement of the waterway, its buildings and its landscapes Poor quality proposals will not receive approval, even where similar types of development already exist on adjacent sites.

- The guidelines offer a source of information to help in providing an understanding of the important principles and issues relating to design within the waterway environment.

A number of design principles, concepts, and treatments are described. These examples show the types of detail which would meet approval, though they are not intended to be comprehensive.

British Waterways will endeavour to make use of Section 106 agreements to improve the riverside environment. The SRB programme recognises the need to improve the quality of the riverside environment, particularly riverside industrial premises. Eligibility for SRB funding will be subject to the adoption of these guidelines for appropriate boundary treatments, external spaces and soft landscape works

The three London Boroughs of Hackney, Tower Hamlets and Waltham Forest, Lee Valley Regional Park Authority and British Waterways will welcome initial discussions with landowners and developers who wish to benefit from the design and construction of attractive waterside spaces Waterway Environment Services has advised on a number of waterside interests on improvement to their immediate waterside open space, and would be pleased to assist in Hackney, Tower Hamlets and Waltham Forest

REFERENCE DOCUMENTS

The following documents were consulted in the preparation of these development and design guidelines:

British Waterways' Planning Handbook (draft, currently not published),

London Canals Committee Development Control Guidelines for Canalside Development;

Landscape Design Guidelines – published by Lee Valley Regional Park Authority;

A Strategic Landscape Vision, produced by Landscape Design Associates for Lee Valley Regional Park Authority;

Towing Path Improvement Study, prepared by Land Use Consultants on behalf of Lee Valley Regional Park Authority;

Design Manual – Landscape, prepared by British Waterways.

FRAMEWORK

The guidelines are presented under the following headings:

CREATING ACTIVE AND ATTRACTIVE WATERFRONTS

PRINCIPLES FOR CREATING SUCCESSFUL MIXED USE WATERFRONT DEVELOPMENT

PRINCIPLES FOR WATERSIDE INDUSTRIAL DEVELOPMENT

PRINCIPLES FOR WATERSIDE RESIDENTIAL DEVELOPMENT

PRINCIPLES OF NEW WATERSIDE BUILDINGS

REPAIRS TO HISTORIC STRUCTURES

CREATING ACCESS TO THE RIVER

EXTERNAL WATERSIDE SPACES

WATERSIDE FURNITURE

PUBLIC ART

BOUNDARY TREATMENTS

WATERSIDE EDGE TREATMENTS

DESIGNING FOR WATERSIDE PLANTING AND WILDLIFE

CRIME PREVENTION

WATER SAFETY

DESIGN OBJECTIVES

- **To create active waterfront developments,** conserve the waterside character, and establish or improve the physical and visual access to the water.
- Establish an integrated character and a consistent approach, unifying all landscape features throughout the study area.
- **Creation of an attractive and safe pedestrian and cycle routes** linking the study area with the wider Lee Valley Regional Park and the surrounding residential areas.
- Protection and enhancement of key views to and from the River Lee Navigation
- **Establish a low maintenance,** easily managed and attractive waterside environment with minimal opportunities for vandalism.
- **Creation of a safe and "secure" waterside environment** by providing defensible overlooked spaces without destroying the privacy and intimacy of the public including boaters.

PRINCIPLES FOR CREATING ACTIVE WATERFRONTS

- Make waterways more accessible, refurbish existing access, create new accesses, construct new pedestrian bridges, and provide clear signposting. Access should safe and easily accessible to all (see Section 8 8 Creating Access to the River).
- Improve waterside environment and towing paths.
- Improve safety with lighting and barriers where appropriate.
- Provide or improve boating facilities, moorings and boat related services
- Encourage boaters to use waterfront moorings, as this will greatly add to the sense of place, character and activity along the river.
- Encourage pedestrian generating activities to locate along the waterfront. Ensure that where pedestrian activity is created the increased numbers can be accommodated safely.
- Provide appropriate new visitor facilities.
- Provide interpretation displays, leaflets and other sources of information, including marketing, to encourage visitors to use a waterfront.
- Encourage residents and visitors to explore the river on foot and by water The longer they stay the more facilities they will use, the greater variety of uses will be attracted.
- Promote recreational, sport and leisure use of the waterways.
- Enhance the refurbishment and promotion of existing visitor facilities, pub and restaurants, and seek to introduce shopping and waterside market facilities as attractors.
- Establish a mixed use waterfront to encourage a variety of uses at different times of day. Particular consideration should be given to evening use of waterfronts.
- Attractive and well designed developments provide interest and variety and will help to attract visitors to waterfronts
- Encourage waterside events and festivals at distinctive locations. This will assist in drawing people to an area, as well as providing activity in itself.

ATTRACTIVE WATERFRONT DEVELOPMENT REFLECTING THE CHARACTER OF THE WATERWAY

PRINCIPLES FOR CREATING ATTRACTIVE WATERFRONTS

- New buildings must be sympathetic in scale and character to existing historic waterside structures. Proposals should seek to determine and understand, so as to reflect, the local distinctiveness of the locality, in particular the waterway. The Lee Valley waterway corridor should be used as a basis for further creation of a local distinctiveness, particularly where there is little within the locality of the site. The Partners will seek to provide guidance on the establishment of such a local distinctiveness within the study area.

- Designs should have regard to the historic waterway, urban setting, and regional park context of the study area Consideration should be given to· siting, orientation; massing, and form of buildings, whilst creating appropriate circulation patterns and public/private open space. Getting the right layout and balance of mass and form, that integrates well the surroundings, will lead to a more dramatic and attractive environment. This will not only be of benefit to the River Lee Navigation and the development, but also will give a positive impression of the development to visitors. Proposals should also complement British Waterways' operation of the waterway, and relevant access and servicing requirements.

- Built development should positively address the waterfront, by fronting the water and providing an attractive façade. This single act alone would have a significant beneficial affect on the current appearance of the River Lee Navigation. Only where this is strategically or commercially not practicable or feasible, should a more defensive approach be taken. Where this is the case appropriate screening should be incorporated.

- Where development offers an attractive façade, boundary treatments should seek to be open as possible, within the operational and security requirements of a development. Boundary treatments should be given careful consideration, as they will they will significantly affect the appearance and visual impression of the development, and subsequently the river setting.

- Detailing and materials (particularly affecting their external appearance) should reflect and/or complement the local vernacular architecture and elements within the landscape

- The arrangement of built form and spaces on waterside sites should ensure that the segregation of public and private spaces is logical and apparent to all using the area without the need to resort to high levels of signage or physical separation.

- Waterfront developments and improvements will be expected to provide a high quality well detailed landscape treatment, using simple and robust details and furniture. This should be consistent with the character, function and scale of the River Lee Navigation and have due regard to the increased recreational use of the waterspace

- Understand the nature conservation value of river corridors and implement management and maintenance regimes to protect and enhance the variety of habitat. This not only will give benefits to wildlife and the environment, but will also have positive effects on the appearance of the setting of the River Lee Navigation and on development.

- Including public art or similar will add to the character and interest of a waterfront and is recommended as a consideration in appropriate locations.

DESIGN OBJECTIVES

Development of land adjacent to waterways and the development of the waterbody itself need to adopt the key principles of urban design permeability, variety; vitality; legibility, visual appropriateness; and richness to create accessible, safe and attractive environments

These should also establish:

- a strong sense of place,
- create active edges to the waterspace;
- waterspace that is of a human scale; and
- pedestrian comfort and easy access to facilities.

Development should provide a safe environment for users and visitors to the waterside and waterside areas. It is particularly important to differentiate between boaters and the general public at mooring positions.

It has been British Waterways experience that the most successful and safe waterside areas are mixed use developments with buildings and spaces overlooking the waterway often accessed from the towing path providing natural surveillance and policing

Successful mixed use waterfront developments need to·

- provide a balanced mix of uses,
- reduce dependency on the private motor cars by creating environments in which it is safe and easy to walk, cycle, and travel by public transport;
- create attractive linked public spaces with active edges which generate natural surveillance, and consider lighting at access points;
- provide strong linkages and connections within the waterfront locality and to the surrounding areas, particularly residential and recreational and other areas of interest,
- create a character and identity through the design of spaces, streets and buildings, and the relationship/interface between them to achieve a "sense of place". The waterway provides a linear route and can be considered in the same way as a pedestrian street, with buildings fronting the waterway in an active and positive manner, and the creation of linkages to other spaces,
- establish an attractive view of the development both from the towing path and from the water at boat level. Windows should be incorporated into buildings at towing path levels, wherever possible, in addition to other levels. The character of the inland waterway often extends beyond the immediate boundary to create a distinctive visual envelope. The boundary with the waterway can form the public and private interface and has a major influence on the perception of the environment;
- consider the height of buildings in relation to its set back from the waterway, eg if buildings are high and close to the waterway they may create an oppressive character – although this may be acceptable in a central urban location, where this reflects the surrounding setting. This should be incorporated with a balanced mixture and variety of open and enclosed spaces;
- enhance the environmental quality of the waterway corridor. It is recommended that, wherever possible, development should avoid the construction of roadways and siting of car parking areas adjacent to the waterway. Access and towing path improvements should form an integral part of any waterside site development proposals;
- consider holistically, the opportunities for waterbased leisure and commercial development to ensure life and vitality to the waterspace and towing path. The "added value" of the waterspace needs to be fully optimised as a leisure and recreational resource in its own right; and
- try and incorporate a diversity of use, with pedestrian generating activities along the waterfront, and encouraging evening as well as day use.

CANALSIDE WITH ATTRACTIVE MIXED USE DEVELOPMENT WITHIN TOWN CENTRE, USING TRADITIONAL AND MODERN MATERIALS

CANALSIDE WITH ATTRACTIVE MIXED USE DEVELOPMENT WITHIN TOWN CENTRE

DESIGN PRINCIPLES

- Establish principles for creating active and attractive waterfronts for both public and private use, (see Section 9.2 Creating Active and Attractive Waterfronts).
- A high priority should be given to designing buildings with a high architectural standard which positively address the water and create an attractive waterside setting Buildings should be sympathetic and where appropriate seek to reflect traditional buildings and style along the navigation.
- Development should generally avoid a multiplicity of styles and materials.
- Buildings should provide well designed and interesting facades to the waterside, including relief, patterns, colour or texture. Roof to gable elevations should be designed to provide interest. The overall roofscape is important and any new development should present an attractive skyline. Exposed roof plant should be avoided, unless it can be shown to be a sculptural feature and an integral part of the overall design concept.
- Industrial development should aim to create interesting and attractive buildings alongside the river. Bland frontages do not enhance the river frontage.
- Be innovative and sensitive to the positive features of a particular location, respect the height, mass and detailing of the existing neighbouring buildings. Not all buildings should be "feature" buildings
- Strike a balance between historical integrity and commercial viability Ensure that where existing buildings are retained and restored, they are brought back into full and interesting uses. New developments should seek to incorporate traditional materials and features within proposals.
- Where particular uses prevent public access ensure bridges are created to maintain pedestrian circulation and routes.
- The development of derelict or redundant sites adjacent to the river should include proposals to enhance its amenity value to provide opportunities for recreation and leisure use.
- New residential developments should recognise the presence and value of the river as a feature within their site planning and layout. Housing should be designed to take advantage of waterside views and aspects.
- Whenever possible, waterside development should avoid the construction of roadways adjacent to the waterway. Housing schemes, in particular, should be designed to present a public face to the river or rear gardens with a coherent layout and river frontage.

INTRODUCTION

Industry has played an important role in the Wick and has characterised the River Lee Navigation for many years. It is fully envisaged that this will continue to be the case, nevertheless there is the potential to improve the way industry and business influence the character of the waterway. The nature of industry within the area varies from portacabins and small warehouse developments to large shed/warehouses and electricity sub-station. Most of the industry and businesses are situated in the southern part of this stretch of the River Lee Navigation, which have a significant effect on the character of this part of the river. Industrial developments have created a negative approach to the River Lee Navigation by placing their backs along the river Service yards, storage areas, etc, are often situated on the riverside together with security fencing.

It is important that only appropriate industry and business are situated adjacent to the River Lee Navigation that will not harm the environment and character of the river. Equally, appropriate planning, design and management are key to ensuring that the environment and character are improved and maintained. The following guidelines are provided to enable this to be achieved.

DESIGN GUIDELINES

- The Partners see B1 and light industry as being the most appropriate form of industry within the vicinity of the River Lee Navigation. Industrial units should be non-polluting, and should not create noise that is significantly greater than the ambient noise level. They should not have a dominant or visual overpowering effect on the river, in scale, form or height.

- The scale, form and layout of industrial and business units should seek to create a positive element alongside the river. The siting of the building is important and should generally be set back, unless it would have a positive effect, in terms of form and architectural style, on the waterway.

- Developments should be arranged so that buildings front the river, with all access, service yards being situated to the opposing side away from the river.

- Careful site planning is necessary to avoid ugly storage, stockyards, lorry parks and car parking immediately adjacent to the river, which detract from the river setting. Where possible, such features within existing sites should be the subject of landscape or screening schemes. Adequate space should be catered for between the building and the river to allow public/private open space.

- It is recognised that it would be unreasonable and not appropriate for industrial buildings to have a high quality architectural However, there would be an expectation for buildings to be designed well, so as to have a positive impression on the river or to minimise the effect of the building on the river

- An open and active waterfront is typical of the way industry originally addressed the riverside. Careful and imaginative design avoids compromising security and the need for unsightly fencing.

- Boundary treatments naturally have a major impact upon the river corridor. Typically along the River Lee Navigation these are very defensive and have a negative impression on the river. It would be preferable to design industrial developments to avoid the need for security fencing, but it is understood that security fencing may be necessary. The choice of fencing style can have a significant affect on the appearance of the river. Fencing with a more attractive appearance can still be an effective security measure Planting can also be particularly beneficial in creating a softer, more natural appearance. If densely planted and incorporating some thorny plants, it can also act as a further deterrent resulting in visually inappropriate styles of fencing and railing. Sensitive screening and security fencing are to be encouraged

HOUSING FRONTS THE CANAL WITH AN AREA OF OPEN SPACE

INTRODUCTION

Residential development is mainly found on the west side of the River Lee Navigation along this stretch and plays an important role in the appearance and character of the river setting It is likely that industrial business/recreational development will continue to form the main type of development adjacent to the river. However, where new residential development is proposed the following guidelines should be followed to create an appropriate approach and setting for the river.

DESIGN GUIDELINES

The following provide principles to good design in relation to residential developments.

- Careful consideration should be given to the design and layout of new development, including; consideration of the reduction of crime, siting and orientation of buildings and spaces, appropriate boundary treatment, landscape design and access to the river. Properties should be of a form, scale density, design, and use materials, that are appropriate to the setting and context of its surroundings.

- Within larger residential developments create a variety of scale, forms and space, by setting back some dwellings, incorporating open space that provides access to the riverside, and provide native riverside planting and habitat creation. Consider the potential for providing long term moorings, available for residents use.

- Where possible, the facades of residential buildings shall be brick faced or brick in combination with other materials

- The boundary with the river forms the public and private interface and has a major influence on the perception of the environment. Therefore any scheme must create an attractive view of the development from the towing path and from the water at boat level. New residential development should recognise the presence and value of the river as a feature within the site planning and layout. Housing should be sited and orientated to take advantage of the waterside views and aspects, ie fronting the river. Rear and side elevations of dwellings and rear and side gardens fronting onto the river should generally be avoided.

- Where a site layout does not allow the residential properties to front the river navigation, and is on the offside, then it is important that:

  - there should be no rear access from the riverside to gardens,

- developments avoid the creation of riverside strips of land that are too small for positive use;
- the water edge areas are "owned", to avoid problems of security and neglect; and
- inherent conflict of the interface between the public realm of the river and the private back gardens are successfully resolved, without the need to resort to defensive barriers.

- In these cases boundary design is very important. British Waterways does not consider high walling or fencing installed by a developer or in the future by householders to be suitable along the river edge. The rear garden privacy should be retained by imaginative landscaping, level changes and hedging, eg creation of waterside terraces with the option of private moorings in order to achieve an attractive water frontage. The developer should provide appropriate boundary treatments as part of the development to provide the right approach initially, but also to encourage house owners to adopt the principles of good boundary treatment. Where boundaries are to remain open or treatment is particularly sensitive, it may be worth considering the use of covenant agreements to retain the desired treatment.

- Waterside residential development should avoid the construction of roadways adjacent to the waterway. This should still enable any residential development to show a public face to the river navigation The introduction of roads, will destroy the visual and physical relationship between dwellings and the river. Equally car parking, unless very limited, should also be avoided British Waterways would only consider, an access road to the river frontage, where there is informal shared space, is paved in materials sympathetic to the setting and the housing is orientated around it and fronting the river.

- Emphasis should be placed on site planning, design layout and orientation to solve issues of security and safety. The dwellings and spaces should overlook the river navigation and should be accessed from the towing path. The visual and physical presence of people in the houses and spaces adjacent to the river navigation provides informal observation along the river, giving natural surveillance and policing.

- Formal play areas for children should be avoided adjacent to the River Lee Navigation, due to safety conditions.

- Wherever possible waterside development should aim to create attractive and purposeful waterside spaces for both public and private use. External spaces should be designed to respect the river environment through the use of traditional materials. Development should avoid the creation of landside strips of land too small for positive use.

- Developments should contribute to the enhancement of the environmental quality of the river corridor. The waterside area should become an integral part of adjoining development and as such their management has to be considered in the context of the development as a whole British Waterways request that access and towing path improvements form an integral part of any development proposals for the site.

- The unique qualities of the built and natural heritage provided by the River Lee Navigation can provide an attractive and interesting feature, within a predominantly urban setting, for residential development. There is a growing national awareness of the added value and commercial betterment of residential development alongside water. A study by Willis & Goddard of the University of Newcastle stated that, "New residential property built next to a well managed waterway commands a 19% premium value over and above that of an equivalent property elsewhere. This premium effect extends to properties at some distance away from the water."

HOUSING FRONTS THE CANAL WITH AN OPEN AND MANAGED BOUNDARY

GOOD SCALE, MASS AND RHYTHM

INTRODUCTION

New buildings must be sympathetic in scale and character to existing historic waterside buildings to ensure that new buildings fit into their surroundings harmoniously.

The following six aesthetic qualities are necessary to ensure that any new building will fit harmoniously into the waterway corridor However, any proposed building design will not be solely assessed in terms of these aesthetic qualities, but also how the design responds to the building's function, energy efficiency and the way the building integrates into the overall plan of the area.

AESTHETIC QUALITIES

- **Siting and Orientation** - New buildings should be sited and orientated to respect the setting of the historic waterside buildings and to positively address the navigation. New buildings should respect historic building lines to retain the sense of enclosure.

- **Massing** relates to the height, bulk and silhouette of a building. The height of a new building should respect the height of existing waterside buildings and its bulk should not greatly exceed the bulk of any adjoining historic buildings The new-build elements should complement rather than dominate the existing structures.

- **Scale** A building should be of a relative human scale from the towing path and respect the scale of historic waterside buildings, structures and waterspace.

- **Proportion** relates to the ratio of solid to void in the facade of a building and with the way the window openings are arranged in relation to the solid wall elements. The historic waterside buildings in Enfield tend to have a high ratio solid to void in the facade of the buildings. Preferably a balanced proportion should be sought, appropriate to the nature of the building and the historical character of the waterway.

- **Rhythm** is the arrangement and size of the constituent parts of a facade, eg the window arrangement and roof form. The narrower the bay, the quicker the rhythm, and vice-versa. Again a balanced approach should be sought, appropriate to the nature of the building and historical character of the waterway.

- **Materials** the choice and detailing of materials for external walls, paving, fenestration and roofs, should be sympathetic with the historic urban and waterway fabric, and provide visual interest.

For new buildings to successfully integrate into their waterside surroundings, they must combine the above qualities harmoniously. These criteria are interrelated with each other,

eg the choice and use of materials affect rhythm, proportion and scale.

DESIGN GUIDELINES

Few traditional waterside buildings remain on River Lee Navigation. Today, the river is typified by industrial development much of which ignores the benefits and potential attraction of a waterside frontage Large warehouses and their associated compounds dominate sections of the river navigation and there are few examples of good modern architecture. There is no strong vernacular in areas adjacent to the river to influence the character of the river. Therefore there is a need to establish a distinctive architectural character and sense of place along the River Lee Navigation that reflects the river setting. The waterside can provide an attractive environment for both residential and employment generating commercial uses, and the following guidelines aim to encourage built development which will benefit the river

- The Partners would welcome schemes that would employ modern architectural technologies, but should be sympathetic to the engineering aesthetics of the historic buildings and structures in order to produce a contemporary design appropriate to the setting. However, careful consideration should be given to materials in any new buildings where they are similar to the existing ones, eg stone and brick types and colour, joint size and finish.

- Developments should acknowledge the River Lee Navigation and the unique character of the waterside location, and should be both innovative and sensitive to the positive features of a particular location. New developments should recognise the river navigation as a positive asset to their site

- Proposals for the re-use and redevelopment of redundant waterside buildings for commercial or residential use will be particularly welcomed where this includes the retention or reinstatement of important characteristics of the buildings and their waterside setting

- Buildings should be of a form, scale and density to complement the local scene, and should respect existing adjacent sites and landscapes

- Any proposed redevelopment within any of the conservation areas scheme will need to ensure that.
  - the unity of groups of historic buildings is not destroyed,
  - the historic skyline is retained and protected;
  - new buildings make a positive contribution to the waterside's historic integrity.

INTRODUCTION

There are a number of interesting buildings, bridges and structures that remain along the Lee Navigation.

- Lee Stopgates, former CEGB Power Station, Gainsborough Primary School, Marshgate Bridge, and
- Old Ford Lock.

It is important that all work and repairs to waterway structures should be carried out to match the original work as closely as possible. Any work to a listed building or structure requires consent from the corresponding London Borough as the local planning authority. Listed building consent is also required for new development which would affect the setting of a listed building or structure. British Waterways are committed to the sensitive conservation of the architectural heritage of the Lee Navigation corridor and the following guidelines aim to encourage good practice for both public and private sector works.

USE OF APPROPRIATE METHODS AND MATERIALS FOR REPAIR WORK

Methods of repair should ensure best conservation practices Responding to immediate maintenance and repair needs without an overall restoration and management plan has resulted in incremental loss of the waterway fabric and character.

It is recommended that the following basic principles of repair should be adopted by British Waterways and the London Boroughs of Hackney, Tower Hamlets and Waltham Forest.

- **Minimum intervention to secure and stabilise structures** - only the minimum work needed to consolidate, conserve and achieve a sound structural condition should be implemented Some parts of a building decay more slowly than others and a selective approach may be required. Unnecessary replacement of historic fabric must always be avoided. Comprehensive repointing of a building or structure is rarely necessary, and sound old pointing should be left undisturbed The destructive removal of old pointing to achieve a uniform appearance is unacceptable Small areas of repointing should be dealt with regularly as items of maintenance.

- **Regular monitoring and inspection of structural defects is important.** Investigation of the condition of materials and of the causes and rates of decay may be necessary in designing repairs. Ideally this work should be linked to engineering inspections Maintenance should be cyclical and prioritised. Appropriate and sympathetic maintenance work is the best way to reduce the need for repairs

- **Maximum retention of fabric** - repair should significantly delay the process of decay without damaging or altering the character of a building, or destroying its fabric Past repairs have often been disfiguring and damaging and the opportunity may arise to remove them. But earlier alterations, including some repairs, may be important to the cumulative history of a building Gaining a uniform appearance at the expense of a loss of historic integrity is not always desirable, and a balance must be struck. Missing structural elements should normally be put back in the course of repair. Replacement of non-structural elements of a building should only be considered where evidence for the replacement exists, where the replacement can be a close copy of authentic appearance, and when it is certain that no loss of historic fabric will occur. Bogus reconstructions (eg "rope marked" handrails) should be avoided.

- **Use of matching and compatible materials in repair and conservation** - Repairs should match or be compatible with existing materials in terms of dimensions, colour, texture and weathering. Salvaged materials should be re-used wherever possible. British Waterways have developed a directory of building conservation materials. New methods, materials and techniques should only be used where their performance and appearance are known from experience, where design defects or incorrect use of materials occur in a building and where traditional alternatives are not possible

- **Use of competent personnel with appropriate skills and experience to manage, survey, record, specify and implement works.** A proper understanding of a building and its historic development and setting is necessary before repairs take place

- **Thorough documentation** - before, during and after. Adequate records of repairs should be kept to inform future maintenance programmes.

Owners or managers of historic waterside property are advised to discuss any proposed works with either the corresponding London Borough Conservation Officer or British Waterways' Architectural Heritage Officer, who can advise on appropriate materials for re-use, repair and refurbishment.

INTRODUCTION

The River Lee Navigation was formed for active use with an important principle being accessibility, adding life and continuity to the waterway environment as well as increasing security for users. Increased access should however be balanced with the desire to preserve the tranquil nature and high wildlife potential of some of the quieter stretches of the River Lee Navigation.

It has an important role as a green pedestrian link through London's Boroughs of Hackney, Tower Hamlets & Waltham Forest. Provision and protection of generous and frequent access points to the navigation is important and should be encouraged if this informal recreational asset is to be furthered Managed access points can help to control abusive activities and balance the needs of people with the needs of wildlife. It is important that new routes and access points are attractive and well maintained to encourage greater use of the waterway. This will additionally have the benefit of reducing vandalism, fly tipping and the likelihood of a neglected appearance.

Whilst access is to be encouraged, it should only be considered: where it is appropriate; will create a desirable end result, and provision can be made for establishing an attractive well maintained environment. The navigation must not be seen in isolation but as part of a wider network of open spaces.

Access should be considered from the following perspectives physical and visual, and public and private.

Physical Access

Where space allows, adjacent derelict land might be converted into a public pocket park opening onto the navigation to create an inviting entrance to the waterway. Access may be provided through the use of green corridors, footpaths and cycleways leading to the river navigation.

Access to the river navigation for private developments should also be encouraged where it involves the positive use of the waterside. Opportunities exist for lunch-time spaces for employees, waterside promenades in association with leisure and retail developments to benefit from the waterside location.

Visual Access

Access may be purely visual, such as a vista along the navigation from a bridge, or the view afforded from; an office, leisure or residential development, overlooking the waterway and adjacent Lee Valley Park. Where such visual access does not impinge upon the character of the waterway, access should be encouraged so that the waterway retains a positive relationship with it surroundings and provides natural surveillance of the towing path environment. Visual access will be either private or public and an appropriate range should be provided, that particularly allowing sufficient public visual access. Development opportunities should consider the potential effect on existing public visual access as well as creating new vistas.

CREATING AND IMPROVING ACCESS TO THE NAVIGATION

The following guidelines aim to increase the public and private enjoyment of the navigation through appropriate access provision and design.

- Developments which close off existing physical access to the navigation will not normally be permitted unless an equivalent or better opportunity for access is provided in close proximity. For any new development which involves the extinguishment of an existing waterside access, British Waterways would expect that it should always be compensated accordingly

- Development should seek to retain public visual access, particularly where there is an important vista or attractive view of the Lee Navigation and Lee Valley Park. Consideration should also be given to avoiding negative impacts on or the elimination of existing private views of the Lee Navigation and Lee Valley Park. Views along the navigation from a bridge or from new development of waterside sites should be encouraged.

- Where there are important vistas or attractive views at strategic locations, consideration should be given to the creation of a "gateway". These are valuable ways of providing entrance features that are distinctive and interesting forms of welcoming people to the River Lee Navigation The value of visual access and gateways is supported in the Lee Valley Regional Park Authority's, "A Strategic Landscape Vision"

- The provision of new public and private access points will be welcomed and the Partners will work to upgrade existing access to the navigation and provide new access points. The design of new access points and the improvement of existing informal access needs careful consideration to encourage the disabled, elderly and push chair users, whilst deterring motorcycles. New access points should, wherever possible, be designed to join the towing path at an oblique angle, rather than at 90° for safety reasons and be free of obstructions.

ATTRACTIVE INTEGRATION OF RAMP AND STEPS ENABLING ACCESS FOR ALL

- New access should always be designed in a positive manner, providing an attractive setting to encourage use and improve the character of the area. Materials and detailed design should reflect the character of the navigation and create a welcoming entrance to the waterway, as well as providing a safe and appropriate surface for the intended users
- Where private developments are sited adjacent to the navigation the opportunity for private access to the waters edge or towing path should be exploited.
- Boundary fencing may be set back to provide a more open, inviting, safer appearance enabling the creation of open space and seating areas along access routes (see Section 9.9 External Waterside Spaces).
- The Partners will continue to work to provide signposting and information at significant access points, or where appropriate.
- New mixed use waterfront developments which include night time uses should include the installation of lighting along the towing path, underside of bridges and access points to the navigation as an integral part of the scheme
- The towing path provides an important function and its linear nature adjacent to the River Lee Navigation is a distinctive characteristic. Its retention will always be sought usually in its current location or where a clear improvement to the towing path can be shown to be achieved from an alternative location.
- New waterside development on the towing path side should include the enhancement of the towing path as an integral part of the scheme.

The creation of a new access point or refurbishment of an existing one should be seen in the context of a complete route planning process. It is important to consider how any new access would link to other routes, and its place in a wider network of routes. Consideration should be given to; who will be the users, likely destination and desire routes. Any route should be designed accordingly.

DESIGN GUIDELINES

Design should cater for a range of users, principally considering towing path widths and surfacing. The following design issues should be considered:

Surfacing
- traditional materials should be used where these do not compromise access for all.
- keep the design of surfacing fairly simple.
- the linear impact of resurfacing in the whole river context should be considered, with respect to use and appearance.
- materials can be used to reflect changing landuses and to denote different spatial uses within the river corridor eg a length of moorings adjacent to a busy path.

Barriers
- consider the need for and location of barriers to separate conflicting uses
- consider whether motor cycles are likely to use the route and whether they should be prevented through the use of barriers.
- ensure critical dimensions for wheelchairs and cycles (where cycling permitted) are met, where access is provided through barriers

Signage
- refer to British Waterways' Corporate Design Manual

Waterside Furniture
- provides an important opportunity for rest and to take in views etc. Possible suitable locations should be considered.
- carefully consider the location in relation to views, aspect, distance from access points for people with a disability, avoiding conflict with other waterway users, and

forming a visual part of the whole river corridor

- design should be appropriate to setting and should consider durability, robustness, vandal resistance, maintenance and cost.

- when appropriate, innovative designs for seating may be considered, eg seating as public art – if there is involvement from the local community, vandalism may be reduced.

If access is to be made available to cyclists, contact should be made with SUSTRANS for advice on appropriate design standards, and the location of other cycleway networks.

ACCESS FOR ALL

The legacy of the functional, industrial canal/river navigation environment, means there is often limited land available for new access construction Sometimes the large changes in level to the waterway corridor make it difficult to provide generous easy access for all everywhere. However, design criteria and minimum standards can be applied in most cases Wherever possible, new provision for access at a change of level should be to the highest standard accommodating the needs of all users, and does not conflict with the other objectives eg heritage conservation

The partner organisations are committed to considering access for all and where any future works are being planned the needs of disabled people (including physically disabled, partially sighted, hard of hearing, etc.) should be taken into account.

Before embarking on providing new access points or refurbishing existing ones, a decision must be made about the extent to which the access can be made safe and practical for a full range of users, including parents with prams, the ambulant disabled, and people in wheelchairs, either independent or assisted. Consultation should be undertaken with the London Boroughs of Hackney, Tower Hamlets and Waltham Forest, Lee Valley Regional Park Authority, Fieldfare Trust, local disability groups and other local access groups

Countryside For All

The "BT Countryside for All" publication was produced by Fieldfare Trust, supported by BT This provides a comprehensive guide to disabled access and is particularly relevant and should be applied to the River Lee Navigation. The guidelines mainly cover

- space allowance and access routes issues - path users/dimensions, reach range, turning space, gradients, path surfaces, steps, handrails and viewing points;

- barriers, furniture, information and amenities - picnic seats and tables, tactile areas, siting and design of signage, litter bins and fishing points;

- network guidelines – advising on ways that disable people and service providers can best work together to understand each others needs and ensure good provision of services,

- transport guidelines – consideration and provision of: appropriate different forms of transport to site for all users; networking; and improving access to transport;

- interpretation guidelines – advice on different types of interpretation and presentation, the gathering of information and compiling to produce appropriate interpretation; and

- information guidelines – planning, deciding on what types of information to provide, and forms of imparting information.

The "Accessibility assessment form" could be completed as a guide to whether a towing path route meets the relevant required standards.

Waterways For All

British Waterways has set up the "Waterways for All" project with the Fieldfare Trust, in response to recognition that there needs to be formal guidelines to guide BW in the provision of appropriate disabled access BW currently regard disabled access as being a key aspect in encouraging and enabling access for all users and seek to incorporate this within any new proposals. However, it was considered important that there was formal guidance to direct the design of proposals and improvements, particularly in reflection of the BT Countryside for All guidelines Consequently, the "Waterways Access For All (WAFA) – Applying Waterways Access For All principles in the context of Good Design Practice, Heritage Management and Environmental Code of Practice appraisals" was produced in November 1999.

The "Waterways for All" project relates to the development of a programme to encourage access by disabled people to British Waterways' canals and rivers. The project has arisen because of a recognition of the need for a comprehensive approach for improving access to the waterways for the disabled, and applying them to the unique and specific circumstances of the waterways. The project covers the needs of people with all types of disability, including people with hearing, sight and learning difficulties, as well as the physically disabled

British Waterways are committed to improving disabled access to the waterways and see the "Waterways for All" project as an important development of this objective. British Waterways will support development which encourages and enables access for all to waterways.

The WAFA outlines the requirement for a Strategic Access Management Plan (SAMP), to provide a strategic overview and help guide decision making. The SAMP serves four purposes.

- to provide a focus for British Waterways statutory responsibilities, identifying improvements, where reasonable, that can be made whilst incorporating issues such as heritage, environment and other user needs,
- targeting sites, facilities and programme changes and then prioritising works that should be included in British Waterway's Business Plan;
- providing local standards for any works affecting access to British Waterways canal/river bridges and facilities; and
- to develop an information and marketing strategy for access improvements.

It is also worth noting WAFA guidance to Stage 1 of an Access Audit for determining the appropriate countryside setting and the standards that would apply. It states:

> "Canals are rarely confined to a countryside setting. They pass through environments that are complex and often a mix of urban, urban fringe, and rural. Often semi-rural environments in an urban area are of equal value to wholly rural environments. The criteria ....show how weighting is given to visitor centres, distance to parking and proximity of dwellings. Many canal settings following the scoring system could result in implementing a standard that compromises the canal experience. .. It is therefore recommended that any improvements are determined within a Strategic Access Management Plan or that the access audit is carried out as part of a wider Canal corridor Study or detailed feasibility."

Whilst the guidelines are intended for British Waterways' internal use, British Waterways would be happy to advise external organisations and developers in its guidance and recommendations, so that they can be applied to the River Lee Navigation.

Points to Consider

The following check list may help in planning a new/improved access point for all.

- If the access links to the towing path, is the towing path in a good condition to allow easy use by wheelchair users, ambulant disabled, partially sighted or blind people, and therefore appropriate to construct an access suitable for these users?
- What are the most suitable locations for providing safe access for disabled use, and, if linking to the towing path, provide an exit further along the towing path?
- What activities and opportunities are there for the disabled within the vicinity of the access point onto the River Lee Navigation?
- Is it possible to achieve access for wheelchair users to the appropriate standard, without compromising the river environment and existing structures?
- Will a ramp be used? Long ramps are only likely to be used by healthy and fit users. If this is the case, it may well be better not to provide a ramp at all, as this will only build up hopes of accessibility.
- In urban and well used locations, signs indicating the direction and distance to the nearest suitable access point should be installed where access is not of a suitable standard.
- Detailed information on the level, standards, conditions of access, relevant to disabled users should be provided on signs, leaflets or similar. Information on the other accessible features of interest should also be provided
- Consider the potential conflict between users if space is tight.
- Will the proposed access be easily accessible for the disabled by different forms of transport?

Changes of Level

Points to consider when designing steps or ramps.

- line of steps/ramp;
- changes of direction;
- whether the steps/ramp project forward or sit into the bank,
- gradient of ramp/pitch of steps;
- number and position of landings;
- surfacing,
- surface water drainage;
- need for a handrail,
- need for a cycle channel for bikes to be wheeled on one side of steps (on towing paths where cycling is accepted); and
- ramps should be no greater than 1:12. Ramps longer than 10 m should incorporate rest platforms of 1.5 m every 10 m and should be adopted in preference to steps wherever possible. New access points should be designed where possible to join the towing path at an oblique angle, rather than at 90° for safety reasons. Access routes should be designed to be free of obstruction and hazards

With long flights of steps, there should be a change in direction at the landings both for safety reasons (limiting the extent of a possible fall) and for ease of use (long straight flights of steps appear more difficult to use). Wherever possible, do not construct long flights of steps at 90° to the river navigation, when descending a slope to a towing path. Where this cannot be avoided, or in busy locations for all access points, a barrier must be provided on the waterway wall. Ramps in particular should be aligned to avoid any danger of running into the river.

Gated Access

There is often a need to control access to navigable rivers/canals. This is usually done by the use of gates or stiles, most commonly in the following situations:

- footpath junctions with the towing path using a gate or stile;
- field access - accommodation bridges;
- service access to buildings /sanitary and rubbish facilities,

- British Waterways yard entrances; and
- restricting certain types of users.

There is little or no local distinctiveness for gate design within the study area However, encouragement will be given to gate designs that reflect the character of the waterway and neighbouring environments that creates a high quality design. The design could reflect part of the vernacular of the river navigation fabric and at other characteristic of the adjoining land use or landscape, depending on its function.

NEW BRIDGE CROSSINGS

There are a few bridge crossings of the River Lee Navigation within the study area, and these are mainly road bridges and footbridges. A variety of styles and use of materials are used in these bridges, mainly creating a significant detrimental and negative visual appearance on the navigation These vary from large spanned concrete bridges, basic steel lattice structures, pastiche styled brick bridges to old brick bridges of a small scale There is a lack of a distinctive, attractive and co-ordinated style that is repeated along the River Lee Navigation. The following guidelines seek to illustrate the aspects that need to be considered in providing a good design that will produce a distinctive style that integrates well with its surroundings and functions well in respect to waterway operation and users.

Road bridge crossings of the River Lee Navigation, particularly those poorly designed have the potential to affect both formal and informal waterway recreation in the study area as well as the wider leisure and tourism industry. As a result, British Waterways will only consider a new road bridge over the River Lee Navigation in the event that no alternative infrastructure improvements are proven feasible or that strategic route crossings, that are in keeping with the Lee Valley Regional Authority's, "Strategic Landscape Vision".

The Lee Valley Regional Park Authority's, "Strategic Landscape Vision" highlights the importance of bridges and their appearance and the need for them to be improved and maintained. There is a recognition of the need to provide bridge crossings at strategic points to increase the accessibility of the Lee Valley and to create and develop new standards of bridge design within the Lee Valley Park.

Any proposed location for a new bridge should not be selected solely by considering the needs of the scheme but should also consider the effect of the proposed bridge on the waterway corridor. The impact of any bridge on the waterway corridor should include consideration of the following aspects.

Navigational Needs

A skew bridge would generally be considered unacceptable as it would extend the length of straight navigation beneath the bridge. Any bridge should be perpendicular, unless it can be proven to there are good reasons not to

Navigational clearance needs to be established. These will vary from navigation to navigation and from site to site owing to considerations of craft dimensions, one or two way boat workings, horizontal alignment and visibility, proximity to other structures, dredging and other maintenance activities. British Waterways strongly recommend that developers to contact Lee and Stort Navigation Office (0207 286 6101) at an early stage to define the following:

- headroom over navigation;
- headroom over towing path;
- navigation width;
- towing path width,
- navigation depth; and
- forward visibility for navigators and towing path users.

Any highway bridge crossing will need to clear th e navigation in a single span and the towing path must pass under the same span as the navigation. Piers within the river navigation would be considered unacceptable to British Waterways.

Environmental, Visual and Landscape Impact on the River Corridor

The impact of the bridge on the waterway environment will require detailed consultation with British Waterways. Not only are bridge aesthetics of great importance but also the setting of the bridge on the local and wider landscape must be considered Bridges are often one of the main features that affect the character and appearance of a river setting, either positively or negatively.

- It is very important that the location, scale, form, design and materials are appropriate and well designed, to create a positive feature on the river and within the wider setting.

TRADITIONAL BRICK AND STONE BRIDGE AT ENFIELD LOCKS, REFLECTS THE HISTORIC CHARACTER OF THE RIVER LEE NAVIGATION

- The River Lee Navigation creates a linear corridor. Bridges are seen by river users as part of a sequence of structures, most of which are contemporary with the construction of the river navigation. Bridges are viewed at leisure by users whether travelling on foot at walking pace, from a boat, fishing at close quarters or from a distance.

- British Waterways recognise that an open parapet on a road bridge would allow road users to view the navigation and have the advantage of a weight saving over masonry parapet. However, British Waterways are concerned that appropriate attention is paid to screening views of vehicles. This could be achieved by incorporating into the bridge design a decorative parapet detail which acts as a visual screen or distracts the eye away from the vehicles crossing over the bridge.

- With regards to setting, how the new structure connects to existing features is important. The wing wall directions should generally be parallel to the transport mode being carried across the navigation Consideration needs to be given to surfaces both beneath and above new bridges, respecting the character and scale of the existing environment. Civil engineering works associated with bank piling and protection need to be similarly integrated with the original river bank. Adequate land must be allocated if a ramp is to be incorporated and sufficient for a supporting bank to run parallel to the navigation. Long ramps can have a detrimental impact on the visual appearance of a stretch of waterway. Consideration should be given to this when weighing up the merits of including a ramp.

- It is preferable to locate bridges where there are existing embankments, as this will remove or reduce the need to construct new banks or steps which are likely to be visually intrusive.

- High embankments are inappropriate being visible at great distance and creating an impact that can be wholly intrusive.

- Planting should be integral with the design of the bridge and should seek not just to replace removed vegetation but to enhance the total waterway scene.

Bridge Design and Aesthetics

The construction of the canal/river navigation network marked a period of astonishing innovation in engineering and architectural design, using new materials such as cast iron. Therefore, British Waterways believes that opportunity now exists to apply similar ingenuity to the design of new bridge structures Such a philosophy extends beyond the simple substitution of modern materials for old but requires a fresh approach. However, all design solutions should be derived from a contextual analysis of the setting, the use and future potential of the waterway for leisure and tourism purposes and of course an understanding of the hydrological requirements of the water over which it is passing. A cursory look to the past can be very informative in designing for the future. Key issues relate to scale, mass, form, shape, height, depth of deck, span, symmetry, proportion and solid to void relationship.

The need to build in sympathy with and preferably, to enhance the historic and natural character and fabric of the River Lee Navigation can be taken as a useful starting point for all bridges in the river environment. Therefore the appropriate aesthetics for any new bridge crossings over the Lee Navigation must integrate the new respectfully with the old, reflecting the scale, style, material, proportions and heritage of the navigation as a whole However, this requirement does not preclude new high quality contemporary design solutions nor does it call for a pastiche of historic road or footbridges, so long as they are sympathetic to the river setting. This may particularly apply to footbridges over water where there is not a need to comply with the technical requirements for road bridges, and therefore have much more freedom of design.

When considering the aesthetics of the bridge there are two main options The bridge should either be a striking dramatic modern structure or it should reflect the scale, style, material, proportions and heritage of the navigation as a whole. In either case British Waterways requires a high quality, well designed and detailed proposal.

In respect of River Lee Navigation a new high quality contemporary design solution that creates a strikingly dramatic modern structure may well be appropriate and capable of representing the heritage of the future.

Developers are strongly advised to contact British Waterways in order to obtain the fullest information on Codes of Practice for works affecting British Waterways. Aspects which will need to be discussed with British Waterways at an early stage with regard to bridge aesthetics include:

- Scale, style, proportions and massing,

- Materials and facings should generally be in keeping with those found locally. There is, however, a presumption towards an appropriate brick or stone, with the facing material and bond pattern reflecting the local vernacular;

- Colour; and

- Architectural features such as string courses, pilasters, pilaster caps and patterned brickwork. It is important that the bridge expresses its structural form and that such architectural features are inherent in the design and not "add-on extras". An arched bridge would be preferred as traditional waterway bridges have curvature. Adding fake historical detail would be unacceptable to British Waterways on design and safety terms. Therefore, a beam bridge with false arch facades would be considered unacceptable. For example, an arch built onto the face of a flat box section bridge can be lethal for a boater who has adjusted to a square headroom beneath the dark soffit, suddenly has to duck to avoid an arch on merging into bright sunlight.

All river bridges will generally be seen by slow-moving viewers, principally on the water or along the towing path. The soffit on footbridges is visually important as it is seen by pedestrians and boat users as they pass underneath Forms of structure which give visual interest on the soffit should therefore be chosen and the quantity and quality of detail are very important. Surface texture and modelling are necessary and natural materials such as stone, brick and timber are particularly appropriate for river and canal bridges

Any footbridge design must have the ability to convey floodwater without hindrance. Furthermore, any changes to existing bridge parapets must take into account flood defence requirements

British Waterways do not generally encourage bridge designers to incorporate ledges and holds suitable as nest/roost sites for birds as these would detrimentally affect the environmental quality of the underside of any bridge for towing path users and boaters. Bat boxes can be designed and used where appropriate.

Needs of Towing Path Users

Safety and security considerations for the towing path users and boaters must be evaluated at the outset of any project, and at every stage of the design process thereafter.

- Any bridge design proposals should provide direct pedestrian access to the towing path from the bridge. However, it is preferable that there be no pedestrian access to offside abutments of river navigation bridge in order to prevent graffiti.

- The environmental quality of the underside of any bridge must be attractive and not intimidating nor oppressive for towing path users and boaters There should be no "dead areas" prone to vandalism on towing paths under bridges.

- The noise impact upon the river environment resulting from a new road bridge crossing must be considered. If noise levels are too great mitigation measures must be introduced.

- The towing path under the bridge should be surfaced in material consistent with the character of the waterway.

STIKING MODERN DESIGN OF BRIDGE ACROSS THE RIVER LEA OR LEE

POCKET PARK SET WITHIN RESIDENTIAL AREA AND FRONTING CANAL

INTRODUCTION

The River Lee Navigation passes through a mixture of spaces including residential, industrial and large areas of open space Each of these open spaces have potential links to the riverside, and all can contribute to the environmental quality of the waterway corridor.

There are many other smaller external spaces, many of which relate to buildings and are in private ownership, and the land frontages of factories and industrial premises which adjoin the navigation. Some of the external spaces may be suitable for informal recreation but are poorly situated, or unsuitable due to current use or would provide little attraction to the user. Where this is the case or no opportunities exist, consideration should be given, when an area is redeveloped, to creating attractive small areas of open space suitable for employee recreation and amenity, particularly when the opportunity is made to positively address the River Lee Navigation waterfront.

New development should consider the provision of open space whenever possible as part of a scheme, particularly where this links with other open spaces, "green corridors", footpaths, cycleways and the towing path

British Waterways along with the London Boroughs will continue to upgrade the towing path and pursue regular maintenance work Private landowners will be encouraged to improve lengths of towing path where there is likely to be a benefit to the landowner. Public and private spaces designed to cater or link to moorings will be welcomed.

The following guidelines aim to encourage the creation of attractive and purposeful waterside spaces, on both public and private land.

GUIDELINES

- All waterside external spaces contribute to and impact on the state of the waterway and careful site planning and landscape design will be expected.
- High quality materials shall be used in the design and construction of external spaces, whether or not they are accessible to the public. Traditional materials should be used wherever possible.
- The location of open space should, wherever possible, make good use of positive existing features within the site and surroundings of Lee Valley Park.
- Consideration should be given to the creation and management of small scale public spaces, through realignment of boundaries as part of a development scheme and via the improvement of pockets of publicly owned land. Provision of appropriate, good access and connection to a wider network of routes is important for the public space to be well used. The Lee Valley Regional Park Authority's "A Strategic Landscape Vision" highlights the importance of opens space and its wish to see more special features and nodes of varying scales within the Lee Valley Park. It sees small incidental spaces adding significantly to the overall impression and value of the Park.
- Public opens spaces should be linked to form a network of urban green spaces and connecting footpaths, interlinked with the towing path.
- External spaces around buildings and developments should, wherever possible, allow both visual and physical access to the waterside for informal private access and enjoyment of the waterway. The views to and from each side of the navigation are to be given due consideration when designing external spaces and frontages, in addition to the vista up and down the waterway.
- Creation of new open spaces adjacent to the navigation provides the opportunity to provide new visual access to the river This will not only help to provide a more open,

softer character to the built up area but will also provide a distinctive focus and attractive views, of the River Lee Navigation and the Lee Valley Park.

- Whilst it is preferable for external waterside spaces to be publicly accessible, there are likely to be other circumstances where it will be desirable to create only privately accessible open space. This may be the case where industrial developments front the waterway on the offside and public access would not be appropriate due to the nature of the business or where there is likely to be little use by the public, due to the clear association with the development or the close provision of public access and open space elsewhere. The creation of private open waterside space will be encouraged, as this will provide an attractive frontage to the development, create informal recreation and amenity for employees and establish an attractive frontage to the River Lee Navigation that add character to the waterway.

- Spaces should be designed appropriately, reflecting the character not only of the surrounding development, but also of the waterfront. Consideration should be given to surrounding land uses to ensure compatibility of use and unified environment. Equally good design should enable the space to be used positively for its intended use, providing a pleasurable and enjoyable space to use.

- Where there is a need to provide security adjacent to open spaces, security measures should be carefully designed to be both effective but also to provide a positive feature which adds and relates well to the character of the space and minimises visual influence on the space.

- The creation of open spaces should incorporate the principles of good crime prevention (see Section 8.15 Crime Prevention) to the minimise the risk of vandalism, be attractive spaces with good microclimates. The intention should be to attract visitors and provide spaces that are enjoyable and safe to use.

- Due to location, surrounding land use and elements on the River Lee Navigation, eg locks, certain sites may provide important "gateways" to the Lee Navigation and/or the Lee Valley Regional Park Authority. Where this is likely, early consultation with British Waterways and the Lee Valley Regional Park Authority is important in order to establish and agree an appropriate approach and a good design solution

- Whilst reflecting local character, open spaces should be distinctive. The contributions of the creative arts to the external appearance and setting of buildings and spaces should be borne in mind.

Good maintenance and management of open spaces is vital to the long term success and use of a space Careful thought should be given at the outset to the design of external waterside spaces. Consideration should be given to cost, organisation and appropriate design to meet the required maintenance standards.

ATTRACTIVE PRIVATE OPEN SPACE IN FRONT OF OFFICES FACING CANAL

INTRODUCTION

The location, design and appropriateness of waterside "furniture" such as seating, picnic tables, litter bins, sign posts and information panels requires careful consideration. Facilities suitable for one location may be redundant in function and inappropriate in design at another, resulting in vandalism and deterioration of the waterway environment. Waterside furniture is important in giving character and providing an unifying image. This can greatly add to the local distinctiveness of an area.

Facilities to enable the enjoyment of River Lee Navigation for passive recreation, in addition to its function as a through corridor, will seek to be provided by the Partners. The provision of public or private facilities by private developers will be encouraged particularly where this specifically relates to the development.

GENERAL GUIDELINES

The following guidelines aim to encourage the provision of appropriate facilities on public and private land that will provide safe, functional elements that users will enjoy, whilst preserving and/or enhancing the historic character of the River Lee Navigation.

- The design of all waterside furniture and fittings should be robust and reflect the character and traditions of the waterway.
- The provision of seating along the towing path and in adjoining public spaces should be relatively frequent where the intention is to encourage the less able-bodied. The location of seating should consider:
  - proximity to access points;
  - likely use,
  - appropriate distance between seating to encourage use by the less-abled;
  - comfortable microclimate;
  - clearly visible to reduce crime, and
  - proximity to features of interest eg good views.
- Signposting and information should be carefully designed and located to benefit the river environment and its users. Signing should be relevant and appropriate - overuse should be avoided.
- Individuality of style is to be welcomed, as this provides distinctiveness and identity to the waterway However this should be in keeping with the style and character of the location and waterway
- Waterside furniture should be designed to minimise the risk of vandalism and be easy to maintain Always consider the cost of maintenance and management when designing waterside furniture.

The Partners will gladly advise on suitable designs for prominent waterside sites.

LOCATION OF FURNITURE

The objective is to provide for the needs of all waterway users. This should aim to provide a balance between preventing the proliferation of waterside furniture, which may conflict with the original character of the waterway, and provision of good facilities Consider the following:

- avoid visual clutter and simplify the provision of furniture by eg providing seating as part of a structure forming some other function such as a retaining wall or barrier wherever possible,
- carefully consider the location so that items are well used and appreciated rather than redundant or in the way; and
- generally siting of furniture should be discrete to avoid conflict with the original waterway fabric or important setting

DESIGN OF FURNITURE

The waterways have a distinct robust character, softened through time by vegetation, wear and changes of use The vocabulary of furniture should reflect this rather than a misplaced nostalgic idea of 19th Century "heritage" or a municipal park/streetscape. When designing consider the following:

- waterside furniture should be designed to take into account its function, ease to use, comfort, maintenance, cost, but also reflect and be in keeping with the local character. A waterway's character relates both to:
  - its form, materials, design of its original construction and use; and
  - the different localities it passes through, which each have their own "local distinctiveness";
- when designing or selecting furniture, both these aspects should be considered in a balanced way,
- reuse of materials such as old lock beams could be considered eg for informal seating in some locations; and
- the use of "public art", particularly in the design of seating, can be a successful approach in eg areas of urban regeneration where better links with the waterway are being sought. However, an over fussy approach should be avoided, and solutions should help to interpret their surroundings in a subtle way.

Seats

The following guidance is provided for the siting and design of seats:

- consider both the location and design of seating for people with a disability as part of planning for a towing path route. (Refer to Fieldfare Trust's "BT Countryside for All" guidelines);
- seats should be placed at locations that provide ambulant disabled and elderly people with opportunities to rest during a towing path walk. Placing a seat not far from and within sight of an access point will encourage use by people who may only be able to visit the navigation for a short time, or who cannot walk very far;
- surfaced resting places at least 900 mm square should be provided next to the seat so that a wheelchair user can sit with their companions,
- the location should be considered in relation to the fabric and other functions of the river navigation, avoiding compromising the elevation of original bridges and structures;
- consider the seat location in relation to views or viewed activity,
- wherever possible, site a seat where there will be inaccessible backdrop. It is always more pleasant to sit with a secure backdrop such as a wall or planting, to provide a greater sense of security and comfort; and
- seats should be set back from the towing path by at least 600 mm to allow the free passage of other towing path users. They should not usually be located on the waterside of the towing path as they will cause a hazard to boaters and tow ropes

Lighting

British Waterways does not encourage extensive lighting of the towing path and waterside, and itself has no duty to light towing path routes, unlike local authorities with public highways. In general lighting is out of character in rural locations, and as such is not recommended. Lighting may well be appropriate in urban areas particularly where there is evening use associated with adjacent land uses, such as restaurants and pubs, or alongside urban moorings as a safety measure As such, developments will be encouraged to provide lighting where it relates to a relevant development and will provide a positive contribution to the setting

FURNITURE

FURNITURE

Lighting should be carefully planned to ensure that it is located and designed to meet a clearly identified need bringing benefits to the waterway environment whilst avoiding any disadvantages such as intrusion from glare, vandalism and maintenance problems Light pollution and the "preservation of the night sky" is an important consideration.

Locations and circumstances where lighting might be used near to the waterway·

- busy public towing path routes and quaysides,
- commercial locks and wharves;
- permanent moorings and marinas;
- bridges on urban routes - under and over,
- highlighting urban landmark buildings and features,
- light as art;
- festivals, events and celebrations; and
- security - buildings and yards. However, as such lighting is likely to be visually intrusive, due to its a high luminaire this should be avoided in the river setting Industrial developments should be designed to avoid the need for lighting adjacent to the river navigation eg yards and access should be away from the river.

Rather than an ad-hoc installation, lighting should be an integrated part of the waterside furniture and overall river setting.

Outdoor light fittings are seen mostly in the daylight, so they should relate to their surroundings both in scale and style. Simple, robust designs are preferred for the river environment, and over ornate, replica old lamps should be avoided. Wherever possible, lighting should be attached to existing buildings or walls rather than columns to avoid the need to introduce a new structure into the waterway environment and to minimise clutter.

Litter Bins

Litter bins can generate rubbish and management problems, and contribute to a municipal character which is out of character with the river environment Generally, litter bins should not be provided except for very well used public places associated with an adjacent development or amenity such as a park

Management of the bins should be to a very high standard, as litter bins in themselves can cause a litter problem unless regularly maintained. Dependant on the level of use, litter bins should be emptied regularly. Consider at the outset what the costs of maintaining, and regularly clearing litter bins will cost, and who is going to pay for it.

Signs

Signs should be kept to a minimum. Where possible signs should not be free standing if there is already a nearby structure on which they can be attached and still be easily viewed. Signage should be there to support what is going on, not to become the main event.

It is important that where signs are used they are designed in a style that is appropriate to the character of the river setting and distinctive to the River Lee Navigation. Advise should be sought from British Waterways.

GUIDELINES

Interpretation by artists of the waterside environment can be the key to creating the sense of place. Public Art for example can contribute to the visual enhancement of the waterway and create a sense of place as well as an unique identity. There is enormous potential for the integration of art works within the River Lee Navigation corridor

The contribution of public art to a project may be expressed in a wide variety of ways, from producing public art strategies to integrated artworks; from street furniture to one-off celebratory events associated with the project's completion Past experience demonstrates that the key to the most effective public art comes from involving artist(s) in decision making from the initial design stages Community involvement can add local distinctiveness, a cultural contribution, and aid in the adoption of a development or an improvement within an area.

The Partnership welcome the utilisation of appropriate materials, and arts and crafts skills to create interpretative signs, waterside furniture and gateway/landmark features. However, any installation of public art within the waterside environment needs to take account of water safety, British Waterways' operational requirements, long term maintenance and insurance issues. The following principles need to be adhered to:

- involve an artist or artists at the earliest stages of a project as a member of a design team;
- permanent artwork must be durable, easy to remove in the event of emergency and as maintenance free as possible,
- waterside art should be located carefully in relation to the towing path, lockside areas and other operational/ functional elements; and
    - siting, scale, form, design and materials of waterside art must:
    - enhance both the historic built fabric and the landscape character of the waterway and retain the attractiveness of the waterway environment;
- not obstruct nor clutter original and existing waterway features, and
- artwork should ideally relate to local history, fabric waterway, local community or otherwise be relevant and appropriate. Siting should form an important part of the design, either being an integral part of a functional element or fitting appropriately and being relevant to a particular location on the waterway.

ARTWORK

ARTWORK

DESIGN STRATEGY

It is recommended that consideration is given by the Partnership to the production of a public art strategy for the River Lee Navigation corridor. This strategy could investigate the opportunities for introduction of the following public art elements within the Lee Navigation corridor:

- **information and interpretation:** eg directional signs and interpretation panels;
- **waterside furniture and other manufactured features:** seating, lighting, bollards, litter bins etc, can be designed in a distinctive manner, that will introduce character, local distinctiveness and an integration of elements. This could be for example, through the design of the whole element, individual parts of the whole, motifs, or colour (refer to Section 8.10 Waterside Furniture);
- **fencing and boundaries:** demarcation of boundaries can be designed in an imaginative way, not only to reflect their function, but also characteristics of the wider setting or similar. This will help to provide an attractive and distinctive element that also achieves its functional purpose;
- **cycle/footpaths:** eg design of floorscapes to depict a particular theme,
- **buildings and structures:** creative lighting and floodlighting of: historic landmark structures; entrances, focal points; or as an art form in itself;
- **earthworks and landscape works:** artwork can be very effectively incorporated into earthworks and landscape works to produce stimulating and exciting designs that are functional and achieve the intended purpose. There are currently a number of good examples of such artwork around the country,
- **gateways and entrances:** to create a sense of arrival at a place of interest;
- **functional places and spaces:** artwork can be incorporated in to such areas as; waterside building entrances and forecourt, lockside areas etc. Here they can have a dramatic effect that provides interest and character with the viewers having a good opportunity to appreciate the artwork,
- **landmark features:** public art can be used to identify, celebrate specific locations and events, and highlight specific views to and from the waterway; and
- **signage:** incorporate interest and character into conventional and functional signs;
- **temporary programme:** eg temporary artwork and performance to support festival or events.

INTRODUCTION

Due to the long linear nature of the towing path, the treatment of its boundary with neighbouring land has a significant effect on the character and enjoyment of the use of the towing path Movement along the river corridor is by its nature slow and leisurely by boat, on foot or by bicycle. All allow time to experience the unique character and detail of the waterway, and equally to notice the unsightly and threatening. Waterside development should aim to contribute to, and enhance the positive experiences and eradicate the negative. It also forms the public and private interface and has a major influence not just on the waterway but also the way it is perceived when viewed from neighbouring land.

GUIDELINES

- The fair face of all boundary treatments should be towards the waterway.
- Building frontages and facades provide important riverside boundary treatments, but should be designed to have a positive and attractive impression on the river
- Where possible, landowners and developers should set security fencing back from the boundary to allow for soft landscaping
- An open boundary treatment should be considered where security is not an issue. Where possible, boundaries to public open spaces and attractive developments should be visually permeable and incorporate access if appropriate.
- Security fencing should not exceed 1.8 m in height and unnecessary deterrents, eg barbed wire, spikes, angles and revolving tops should be avoided.
- The incorporation of brick piers and low walls to railings and fencing will greatly add to their appearance. Due to the extra cost these should be used where appearance is important.
- The use of climbing plants in association with security fencing and other landscaping should be encouraged.
- Where boundaries are long, the treatment should vary through mix of orientation, offsetting, materials, pattern and landscaping.
- Boundary treatments should, where possible, be resistant to graffiti, or surfaced in such a manner that graffiti can easily be removed
- Take the opportunity to introduce lighting, particularly of buildings which form part of the boundary.
- The issue of crime prevention should always be considered in relation to the design and location of boundary treatments to prevent the creation of blind spots and hiding places for offenders (refer to Section 8.15 Crime Prevention).
- Boundaries to public open spaces should be visually permeable but should prevent unintentional access to the river navigation Links with the towing path should be considered (refer to the Section 8.8 Creating Access to the River).

London Borough of Enfield and British Waterways will welcome initial discussion with landowners and developers to ensure the correct balance is struck between security, privacy and aesthetic appeal Waterway Environment Services are particularly experienced in the design and planning of waterside edges and boundaries and will be pleased to assist where necessary.

Planning and Development

British Waterways would welcome the redevelopment of waterside industrial estates. When redevelopment is undertaken developers will be required to establish a more positive approach to the treatment of the waterside boundary of a development, addressing it in a creative manner. The River Lee Navigation provides an attractive setting for developments and gives the opportunity to provide a positive image for the development as well as enable employees to enjoy the waterway environment.

Public and private open spaces are encouraged along the waterside (refer to Section 8.9 External Waterside Spaces), together with waterside planting.

Further guidelines are provided to creating a positive waterside treatment within the Section 8.3 Principles for Creating Successful Mixed Use Waterfront Development and Section 8.4 Principles for Waterside Industrial Development.

Security

Security is often an important issue both to providing a secure location for storage, production etc. and for the safety of the public. However, it is often not necessary to erect security fencing along the boundary with the river, as the River Lee Navigation can act as a natural moat.

Where development is designed to front the waterway, access, service yards and car parks can be located on the opposing side of the building, closer to the main access roads. These can be secured if required with security fencing carefully located and designed to integrate with the waterway setting, linking to the side or front of the building.

Where for logistical/operational reasons it is not possible to avoid locating security fencing along the waterside boundary or where there is unlikely to be development on site in the short to medium term or where other internal security fencing will be visible form the waterway, the guidelines for the design of security fencing, outlined below, should be followed.

Where security fencing must be located along the waterside boundary, British Waterways would strongly encourage the setting back of the fenceline from the boundary, to allow space for woodland/scrub planting along the water side of the fence. This will have the following benefits:

- provide an attractive, more rural setting for the waterfront;
- screen industrial developments from the waterway;
- improve security if thorny, impenetrable scrub/understorey is established;
- provide an attractive backdrop for industrial developments; and
- create new habitats and improve the quality of wildlife.

Open Space and Recreational Setting

Encouragement is given to the appropriate redevelopment of all derelict land in accordance with these guidelines. Consideration should be given to using derelict land for the creation of public open space, enabling greater access and recreational use of the waterway and the development of a network of green spaces

Where there is currently an attractive open space or where there are proposals to improve open space, an open boundary treatment is to be encouraged, whether retained or created. The waterway should be allowed to become an integral part of the open space with open visual access. This could be balanced with a moderate amount of planting and other waterside treatments as appropriate to provide interest and variety.

FENCING IN THE WATERWAY ENVIRONMENT

Fences are needed for a number of quite different functions - they can warn, delineate, define changes in level, protect, screen and reassure, as well as prevent access. All these situations produce quite different design solutions, and in the river environment there are a number of traditional types that form part of the historic river fabric. Fences should reflect the strong, simple, straightforward, robust characteristics of the waterway environment.

Before improving/replacing a fence or installing a new one, consider the following points:

- where fences are part of the original historical fabric of the river environment, they should be restored. If restoration is not viable because of the extent of decay, the fence should be replaced, where appropriate, by a fence replicating the original;
- check whether the fence is part of a listed structure or in a conservation area. This is likely to affect what can be done to the fence and whether and what style of new fence can be erected;
- understand all the potential functions of a new fence, as this will determine the design choice and assess the need for measures to deter vandalism;
- Consult user groups and adjoining landowners to ensure there are no conflicts;
- assess the intended life of the fence and the likely degree of maintenance; and
- the appearance of the fence should suit the location eg whether urban or rural, should tie and be complementary with other structures, and reflect the character of the river.

Types of Fencing

Likely uses of fencing along the River Lee Navigation are:

Protective - eg ramp to a bridge, at the bottom of descending ramps/steps at the waters edge, separating a busy urban towing path from a lockside, temporary fencing around planting beds.

Typically steel railings and guard rails where there is a need to separate conflicting uses or pedestrians from hazardous situations along the waterfront. Where there is a need to protect planting, timber knee rails are often used or chestnut pale fencing where the protection is only temporary.

The fencing should be appropriate to provide the intended protection in an effective manner, considering all potential hazards. It is equally important that the fence should be designed to create an attractive appearance that is in keeping with its waterside setting. Such fencing has the potential to be visual intrusive and careful consideration should be given to its actual need and that the fence provides a positive attribute that does not detract from the appearance of the waterway.

Boundary - eg lock cottage garden timber picket fence, post and wire stock-proof towing path hedgerow fence;

Boundary fencing may double with another function, eg security, but quite often the only intended purpose is to demarcate a boundary. There is often a wish to provide only a low cost functional fence, and whilst this needs to be a consideration, it is important to consider the appearance of the individual boundary. This should consider the boundary of the waterway over a much wider area, to ensure that there is a continuity in style that is appropriate and reflects the historic character of the waterway. With the above in mind, there is the opportunity to provide distinctive fencing styles that give a uniqueness to the individual property but also add variety and interest to the waterway as a whole.

Screen - eg around rubbish compounds or car parks.

Usually visually solid or with a limited permeability, typically close board fencing and timber palisade fencing or similar. The emphasis is on screening, but may not always be necessary to completely screen eg adjacent to a car park, where some permeability would be acceptable or desirable. As such the fence should be appropriate to what is being screened and its ability to achieve this. Equally important is to consider the effect of the fence on the waterway setting, which itself may be visually intrusive. If the elements to be screened are large, in particular high, there is a temptation to construct a high fence capable of screening the elements. However, the fence may end up being more intrusive than the elements intended to be screened, particularly within the confined space along a towing path

Solid fences often cause wind turbulence and affect the microclimate immediately downwind of the fence. Consideration should be given to the effect this will have on any potential neighbouring users. If this is likely to be a problem a more permeable fence should be used, as this creates less wind turbulence.

Planting is often used as a more effective and attractive way of screening, but fencing may be more appropriate where space is tight or to provide screening whilst the planting is establishing Where space is tight careful consideration should be given to the effect on immediate locality in respect to appearance and the dynamics of personal space When used in conjunction with planting, the function and durability of the fence is less important, and the combination of the two should be considered together, in terms of screening, appearance, cost and maintenance.

Security - eg around British Waterways yards or waterside business premises.

Security fencing should be visually permeable to minimise its impact, with industrial activity visible, combined with lengths that have screen panting.

Visually aggressive approaches to fencing design, with additional razor wire or rotating baffles on top of the fence, detract significantly from the river environment They also create a negative and defensive appearance, establishing a threatening character to users of the river navigation, whilst also drawing attention to the need for high level security fencing.

Mild steel palisade fencing is often left galvanised and unpainted, making it more visually obtrusive. Painting black or dark green can help to reduce the impact, blending with vegetation Where fencing would form a key boundary, consideration should be given to the incorporation of artwork into the fencing to improve its appearance and interest.

Planting can be used to soften the effect of security fencing, but should be of a type that does not reduce the effectiveness of the barrier.

BOUNDARY IMPROVEMENT CAMPAIGNS

Boundary improvement campaigns have been launched with businesses on a number of waterways to help bring about small improvements that have a great impact on the waterway, without fundamental redevelopment.

Boundary facelifts can provide the opportunity to promote local industry, where appropriate, in partnership projects. Often the improvements can be built into existing maintenance budgets or by rationalising working procedures, without extra cost to the landowner. A grant scheme for landowners and businesses can sometimes be made available, often as part of a larger project for environmental improvements using eg European funding.

ATTRACTIVE PERMEABLE FENCING ADJACENT TO OPEN SPACE

INTRODUCTION

Waterside edge construction and bank protection are fundamental to the structure of the Lee Navigation in retaining the alignment of the waterway, creating fully functional wharves and mooring points, and protecting embankments and their associated habitats from erosion from boat wash.

Existing Edge Treatments

Types of edge treatment which have been used in the study area are:

- predominantly steel/concrete piling and in-situ concrete usually with concrete coping which is either exposed above the water level giving a stark engineered appearance unless softened by adjacent marginal and/or aquatic vegetation;
- stone/brick walling - limited to localised sections; and
- soil embankment naturally colonised by marginal and aquatic vegetation.

Steel and concrete piling have been the traditional form of retaining edges, forming a reliable, strong wall, with relatively low maintenance and of moderate cost. However, their aesthetic value is low and often create a negative image that detracts from the appearance of the river navigation, particularly in the more semi-rural settings of the Lea Valley Park They also have the disadvantage of providing little wildlife value and if put into existing soft bank can significantly detract from the existing wildlife value. The use of a hard edge often removes existing marginal vegetation and prevents its recolonisation, stops borrowing of animals into the river bank, and significantly restricts access of animals into and out of water. Whilst this treatment is undoubtedly is important in certain locations, consideration should always be given to whether alternative treatments could be used

GUIDELINES

The choice of edge treatment may be determined by engineering requirements, but the following issues should also be considered:

- location in relation to function - moorings, lock approaches, bridges and so on;
- visual impact;
- ecological impact and opportunities for enhancement;
- historical precedence;
- risk to users; and
- moorings - craft are an important feature bringing character and activity to the waterway Moorers require a hard edge against which to moor at a suitable height above the waterline to facilitate access on and off the boats. Where there is dramatic variation in waterlevel, the specification of rise and fall pontoons will be necessary.

Bank protection techniques that should be promoted or restricted in the study area are as follows:

Steel Piling

Steel piling is usually employed where there is an engineering requirement eg unstable soils; a vertical edge is preferable to maximise the width of the towing path; or a hard edge is required for mooring craft.

Steel piling however gives a harsh visual appearance to the waters edge and the specification of stone or brick cladding above the waterline, timber fenders and timber copings should be considered to help soften its impact.

The hostile environment created by piling is not conducive to natural colonisation by wetland species therefore floating vegetation boxes and coir rolls should be used where possible (refer to Section 8 14 Designing for Waterside Planting and Wildlife). Where it is not necessary, greater benefit to nature conservation can be provided through not using steel piling and using vegetation or bioengineering techniques instead

Concrete Piling

Concrete piling is little used now with in-situ concrete more commonly being used for repairs and new/relined lengths. The use of concrete for waterway wall construction allows for wide flexibility in the specification of texture, colour and form. It is possible therefore to replicate the design of original waterway wall features, provide integrated niches for plant colonisation and escape routes for animals.

However concrete has a hard engineered appearance which does not weather well giving an unattractive appearance. Therefore whilst versatile, it is recommended that the use of concrete be restricted to coping details and only used as a waterway wall treatment where absolutely necessary. Again, where it is necessary to use it or to improve existing concrete walls, the use of brick or stone copings, and/or the use of vegetation boxes and coir rolls, should be used wherever possible.

Vegetation and Bioengineering

Native vegetation can be effectively be used for bank protection, reinforcing substrates are appropriate solutions to bank erosion, particularly on the offside where boat moorings are not required. The roots of waterside trees can provide effective forms of stabilisation, where they are unlikely to create damage to neighbouring structures. Planting of alder and willow or the use of willow retaining walls, may be an appropriate treatment. Reeds, if well established, are tolerant to boat wash and act as a deflector, dissipating energy before damage can be done to the bank structure. As well as their habitat value, reeds can act as a nitrate "sink" to help prevent algal blooms.

There are various forms of bioengineering that can be used to stabilise banks and enable re-establishment of native emergent vegetation, and include the following:

- geotextiles such as "Nicospan" are used to retain dredged material or prevent erosion;

- biodegradable mats and coir rolls with appropriate marginal aquatics incorporated. Coir rolls have the advantage of not requiring an existing soil structure and thus are self sufficient and can be located anywhere;

- hurdles – hazel wattle hurdles of approximately 1 8 x 1.8m, held in place by posts or stakes. Again, like coir rolls are not dependant on a soil structure,

- willow spilling and posts – will stakes inserted into the ground provides stabilisation of the bank, which is further stabilised by the self rooting of the willow. Careful management is required to prevent excessive vegetative growth; and

- timber crib walls formed from an interlocking lattice of wood, with vegetation planted in between. This form of treatment is subject to scouring and is less desirable, but does provide a mixture of hard and vegetated bank reinforcement.

Stone and Brick

Stone and brick were traditionally used in the construction of waterway walls, wharves and locks in the Enfield area. Surviving examples of this type of construction, can be found for example at Enfield Lock. They provide vital information regarding brick type and sources of stone, dimensions, bonding patterns and mortar mixes.

In a historical context or where a high quality appearance is required stone of brick walling is recommended. The reuse of original materials and traditional construction techniques should be encouraged wherever possible, to help retain the character of the navigation.

Timber Edging

Provides a traditional, aesthetically pleasing, moderately long lasting and relatively economical way of edging watersides. It is relatively easily repaired or replaced. It is light but strong, has reasonably good shock resistance For these reasons it is strongly recommended that this is considered as a waterside edge treatment Treated softwood is probably the most appropriate

WATERSIDE EDGE STRUCTURES

The chosen design should incorporate additional design features to aid the escape of people and animals who inadvertently fall into the water. Examples are as follows.

- **means of escape for humans** – a means of escape and grab chains to enable a person to hold on and keep their head above water. This should be provided on steep sided waterways where the freeboard is significantly greater than usual and where a busy or narrow towing path is very close to the waters edge A local risk assessment should be carried out to determine an appropriate level of provision All locks should have ladders provided.

- **animal ramps** – Animal drownings are a common occurrence in many canalised waterways with steep sided banks, particularly where new bank protection has been constructed. Structures can be installed to reduce the incidence of animal drownings. The simplest is an animal ladder, which is firmly attached to the top of the waterway wall and trails into the water. Plastic coated wire mesh or geotextiles can be used. Other means of escape include animal ramps which should be located 50 cm below the water level at a gradient of 35 – 45°. Such structures were traditionally used along canals by horses.

EDGING DETAIL

INTRODUCTION

Despite its urban setting the River Lee contains richly varied wildlife habitats, supporting a wide range of aquatic and terrestrial flora and fauna. Submerged, emergent and marginal vegetation types are well represented All the components of the waterways' flora and fauna combine to make the waterway an important wildlife resource. Rivers also provide important wildlife corridors, particularly through urban locations, linking to other wildlife corridors and habitats.

This unique asset needs to be maintained and managed and should be considered as an important factor in any proposals for waterside redevelopment or change. There is also little tree or woodland planting within the River Lee Navigation corridor or associated with its setting. This has a significant effect on the character and appearance of the river, particularly within an urban context. The planting of trees, woods and the creation of new habitats is a key objective in improving the River Lee Navigation. The following guidelines aim to encourage the promotion of nature conservation on both public and private land.

OBJECTIVES AND ISSUES

- Waterside vegetation provides an important characteristic of the waterway scene and creates valuable habitats for wildlife. Further planting should be considered for:
  - providing an attractive setting and spaces for enjoyment of the waterside, as well as enclosure and enhancement of views,
  - helping to integrate a development into the surrounding landscape;
  - screening unsightly developments and features, which would otherwise have a detrimental visual effect;
  - softening of hard, urban visual qualities often associated with man-made structures;
  - shelter and providing a pleasant microclimate, eg from cross winds at lock approaches, and
  - improving nature conservation value.
- All planting proposals should take account of the linear character of the waterway, including patterns of enclosure as well as complement the wider landscape both ecologically and visually
- Existing trees and vegetation which make a contribution to the landscape of the waterway corridor should, be retained where possible as part of new developments.
- Existing wildlife habitats should be protected, enhanced and maintained, wherever possible.
- An assessment of nature conservation value should be carried out for an area particularly where new development is proposed with the aim to retain and protect anything of value. English Nature should be consulted immediately if protected species such as crayfish, Water Voles or bats are suspected or found to be on a development site They will provide advice on appropriate action.
- The use of native species is encouraged within the waterway corridor and alongside boundaries particularly on the offside of the River Lee Navigation. The use of locally occurring indigenous species will be particularly encouraged to preserve the existing landscape character and maximise the wildlife potential. Where planting schemes are undertaken to reflect local habitats, plants of a local provenance should be used. Ornamental planting should be used in more formal urban locations.
- Appropriate planting treatment should be considered in relation to new and existing industrial sites where they will not contribute positively to the waterway environment. The objective of the planting scheme should be to provide at least enough screening to sufficiently screen the development in winter.
- Where space allows new planting schemes should seek to create a variety of habitats. This should be further enhanced and developed through maintenance and management.
- Planting schemes should be appropriate within the wider context of the River Lee Navigation, reflecting character and providing variety and diversity. Planting an often play an important role in linking disparate elements, creating greater unity and improving visual qualities. It can reinforce or provide a new character and often softens strongly urban characteristics
- The design, creation, maintenance and management of wildlife habitats should be actively undertaken wherever possible.
- Management plans should be prepared and implemented for all sites of nature conservation interest.

British Waterways and the Lee Valley Regional Park Authority can offer advice on nature conservation and management, and will be pleased to liase with owners of waterside property. In addition, they may be able to identify sources of grant aid.

GUIDELINES

The following are provided to guide the preparation of planting proposals

Function

Determine what the purpose of the planting is and how this can be best achieved, eg screening – use native fast growing trees with some evergreen content. It may be that natural regeneration is the best approach, where, for example, there is a good seed bank that will create the appropriate habitat, without the need for quick establishment.

Site Assessment

Ascertain information on the aspect of the site, location and type of existing vegetation in the locality and, the soil type, its pH and its water holding capacity.

Relate Planting to the Site

Selected species should be appropriate to the location, soil type, pH, microclimate, as well as being appropriate to the type of habitat, function and appearance.

Design

Successful planting schemes are usually based on careful design, considering species selection, composition, location, planting densities, and mixes. This will either reflect natural habitats or to create attractive, functional and effective planting Designs should consider maintenance and management at an early stage, in order to successfully establish appropriate, cost effective planting and secure its long term success

Microclimate

Consider the effects that the planting proposals will have on the local microclimate. These may include, for example; shade, wind turbulence and shelter, which will affect the enjoyment of the use of spaces by people.

Habitats

Relate the type of planting to the Countryside Commission's "Character Areas" and English Nature's "Natural Areas" maps to ensure appropriateness. New planting schemes should use species native to the area and preferably of local provenance to encourage good establishment of planting and retain the local waterway character.

Appropriateness

Ensure that the type and location of new planting contributes to rather than conflicts with the ecology and landscape of the river corridor and surrounding land.

Constraints

Be aware of planning constraints, in particular landscape and nature conservation designations, underground and overhead services and building and engineered structures.

Care should be taken where there are possible engineering constraints that could effect the type or location of the proposed new planting, eg on or near a structure that could be vulnerable to root damage.

Where the waterway wall is stable and there is no danger of leakage, tree planting is to be encouraged. The following is a rough guide to planting trees adjacent to the waterway:

- species with very invasive root systems such as willow and poplar should be avoided or planted further back from the waters edge; and
- generally all other trees should not be planted closer than 6 m from the waterway wall.

Shrubs with invasive root systems should be kept at least 2 m away from less stable waterway walls and minor structures such as manholes, sluices, pavings, steps, etc to avoid damage by roots. Stable waterway walls and larger structures can resist the effects of shrubs with invasive root systems

Protection

Depending on the location of the planting there is likely to be varying degrees to which the proposed planting may be damaged by animals or humans Planting along the boundary to fields, may be grazed by cattle or horses. Plants can often be damaged by rabbits particularly when other food sources may be scarce – this is still possible within urban areas. Protection should be given where it is known that there is a relatively high rabbit population within the area. Protection against animals may take the form of fencing, tree shelters or rabbit guards etc, but these can be visual intrusive and should be avoided in urban locations and where a high visual quality is required eg ornamental planting. Choice of protection should be based on effectiveness, appearance and cost.

Human damage may arise as a result of poor planting design, the creation of desire lines, hardiness of plants used, and from vandalism. It is important to understand what the likely pressures from humans are going to be on the planting. Pressures often arise from users wanting to use particular desire routes. Be aware of them and design for them. Avoid narrow beds between paths and areas of recreation. Where there is likely to be a problem with vandalism consider the type of planting method used For example

- use mass whip planting rather than larger nursery stock for woodland planting;
- protect planting eg tree guards; and
- consider involving local communities. Implementation involving the local community, especially children, may be the key to the success of a scheme in vandal prone areas.

Economic Return

It may be that the planting can provide an economic return, such as timber or coppice products from a woodland, or fruit/nut from orchards.

Maintenance and Management

Ensure there is adequate maintenance for successful establishment The implementation of regular maintenance and long term management regimes are essential to achieving the desired planting objectives.

All planting contracts should therefore be let with a minimum 3 year maintenance period to ensure successful establishment of planting and replacement of defective plants, followed by a 15 year management plan which identifies the operations by which the planting/habitat objectives are achieved. In the case of woodland planting there may also be the additional benefit of an economic return. Assistance with cost can be provided through various grant schemes for planting, maintaining and managing habitats eg woods, hedgerows, ponds.

Maintenance and management operations should be considered at the outset and incorporated into the design, eg good ground preparation and the use of the right species will determine whether there is good establishment and success of the planting and the extent to which maintenance is required. Allow an adequate budget for a good level of maintenance to ensure a successful achievement of planting objectives.

UNDEVELOPED LAND ADJACENT TO THE WATERWAY

Much of the land to the east of the River Lee Navigation is undeveloped and lies close to the water table and as a result supports a rich variety of wetland habitats interspersed with localised pockets of native scrub vegetation.

This land is important to the setting of the River Lee Navigation and has a valuable potential as a waterside habitat. Nevertheless there is the opportunity to maintain and improve the species diversity of the existing grasslands, create new wetland habitats, where appropriate, small areas of scrub and copses and greatly enhance the waterside setting of the River Lee Navigation, to which these guidelines would strongly encourage.

Where possible these wetland sites should be enhanced through the planting of appropriate native tree and shrub species and managed to provide a valuable wildlife habitat eg coppice rotation. Public access and educational uses for these sites are also encouraged.

HABITAT CREATION

Under ideal waterside conditions where human intervention is at a minimum, and bank profile is favourable, a variety of habitats and seral stages can be found, from floating aquatics to woodland However, the river navigation forms an artificial, engineered waterway, with specific operational and functional requirements It is important that these form one of the highest priorities in the management of the river navigation. Nevertheless, as the navigation provides an invaluable wildlife corridor, opportunities should be sought to make the most of the nature conservation potential within the operational constraints. Habitat creation should be achieved as follows, where possible:

- the seral stages found naturally along waterways should be replicated, and through maintenance and management techniques, the successional process needs to be arrested to retain the variety in vegetation and habitat types; and
- vegetation should be allowed to colonise naturally to ensure that plants are from local seed sources. This is particularly important in the case of marginal and aquatic plants (see following section).

Trees and Woodland

Woodlands provide one of the most valuable forms of habitats, due to the extent of wildlife supported. As there is little tree cover along the River Lee Navigation, support will be given to the planting of trees in its own right, but also where it provides an other function. Planting should usually be native and typical to the river setting. Grants are available from various sources for tree planting, eg the Forestry Commission.

Marginal and Aquatic Planting

Marginal and aquatic planting provide invaluable habitats for nesting and breeding invertebrate and bird species, help prevent erosion of waterway banks and contribute to improved

water quality eg fringing reeds have been shown to act as nitrate sinks.

Marginal vegetation occurs naturally where the profile of the river bed is such that shallow water areas are created Where possible therefore, colonisation of marginal habitats should be encouraged via the construction of suitably profiled waterside embankments. This will also ensure that waterside species are sourced from local seed

New soil embankments should be shelved into deep water or gently sloping into shallow water, to create the optimum conditions for natural colonisation by wetland species.

In the case of hard edged sites, it will be necessary to artificially introduce marginal and aquatic species through the use of marginal raft boxes and coir rolls. The use of locally sourced seed is preferable.

For health and safety reasons, the structure needs to be robust enough to withstand the weight of people even though they should be inaccessible to people. It is obviously important to locate rafts away from the main navigation channel moorings.

If marginal and aquatic planting are to be retained at a site, a suitable management regime will be required to prevent siltation of the river bed and the natural succession of marginal to bankside vegetation

Hedgerows

Hedgerows also provide important species rich habitats for nesting birds, insects and invertebrates. Within the River Lee corridor hedges are used to delineate field boundaries and the towing path from adjacent land.

Existing hedgerows should be retained where possible and appropriately managed. Management operations include hedge laying, gapping up and formative pruning Hedge laying is particularly successful for increasing hedge density, creating effective stock proof barriers, and being beneficial to wildlife Managed hedgerows also provide a good investment creating a healthy, long lasting impenetrable barrier reducing the need for additional fencing which provides an unattractive element and habitat.

It should be noted that all operations relating to relevant existing hedgerows should be carried out in accordance with the Hedgerow Regulation 1997.

Grass Verges

The grass verges play an important role in the diversity of the river navigation watersides, either providing a well managed, regularly mown strip in urban locations, a place for anglers to sit undisturbed and fish, or as a linear habitat and wildlife resource. It is important to recognise the value of each use and to create and retain as much of the width of these grass verges as possible, and to maintain and manage them in an appropriate manner.

With regard to new development where grass verges are being considered adjacent to the river navigation and where the management of existing grass verges is being undertaken, it is important to provide the right maintenance and management to achieve the most appropriate objectives, appearance and wildlife value.

A closely cut grass sward will provide better access and a more formal, tidier appearance, which will be appropriate in certain locations For example, opposite housing and office developments that directly front onto the river navigation. It is likely that a narrow strip either side of the towing path will be appropriate to provide better access, where users can move on and off the towing path.

However from a wildlife point of view, it is more beneficial to leave the grass verges uncut, except for an occasional cut each year. Grass verges should be managed in such a manner, wherever possible, without being detrimental or conflicting with other objectives Grass cutting to benefit wildflower establishment should be carried out once or twice a year, and should be undertaken on the basis of the species mix present or those wished to be encouraged Two cuts will have the benefit of containing vegetative growth, but should be timed to allow for flowering and/or seeding of the main plant species. Preferably grass cuttings should be removed to reduce fertility and improve species diversity.

When creating a grass verge, either of the following approaches should be undertaken, as appropriate:

Formal Grass Verge

Establish a fertile soil, using compost/soil improver or fertiliser, well cultivated soil and preferably a low maintenance hard wearing grass seed.

Informal/Meadow Grass Verge

The main objective is to provide a species rich grass verge incorporating a variety of wildflowers. To achieve this it is vital that a low soil fertility is established, and as such no topsoil or soil improver should be used in preparing the ground Indeed it would be preferable to replace the existing topsoil, with an appropriate subsoil. The soil should be cultivated and seeded. Ideally seed should be collected locally eg a local species rich meadow grassland, or be bought as a mix. Where a mix is used, it should preferably be of local provenance and the species mix should be appropriate to soil type, drainage and the Natural Area classification. Wildflower plugs can be used as a way of improving an existing sward and may be appropriate in particularly situations. However, this can be expensive and not always successful as a means of establishing a wildflower meadow, particularly if the existing grass sward incorporates aggressive species.

NATIONAL BIODIVERSITY

In response to the DETR's UK Biodiversity Action Plan (BAP), which sets the framework for more specific BAPs, British Waterways is completing its own corporate BAP which is due to be published summer 2000

The British Waterways BAP is likely to become an important and increasingly integral part of British Waterways' work planning. It will help ensure that British Waterways maximise the wildlife and nature conservation value of its waterways, as an integral part of routine maintenance, repair and development projects.

The main aim of the British Waterways BAP is the proposal of targets and actions for each of the species (eg dragonflies, damselflies, moorhen and water voles) and habitats (eg towpath verge, built environment and the waterway channel) within the plan. Individual waterways will then build on the proposals for their waterway. British Waterways' Environment & Scientific Services will provide help and advise on this process.

The British Waterways BAP will help British Waterways management units and individual waterways incorporate the proposed targets and actions into work plans and business planning. It is then hoped that the British Waterways BAP will act as a framework for BAPs at a more local level. The River Lee Navigation will be in a good situation, being able to draw from the British Waterways BAP, the Lee Valley Regional Park Authority BAP, the London Biodiversity Partnership and of course any BAPs that have been done by the local authorities. This biodiversity approach can only be achieved through partnership, primarily the Lee Valley Regional Park Authority, the London Ecology Unit, London Waterways Partnership, London Canals Committee and other bodies with an interest in or responsibilities for wildlife along the River Lee Navigation. Please contact British Waterways for advice

DESIGNING FOR WATERSIDE FAUNA

Water Voles

Current factors causing loss or decline of the Water Vole population are:

- riverside work, flood alleviation schemes and grazing – dredging and hard edging, may damage burrow systems and cause the removal of bank and aquatic vegetation, whilst heavy grazing removes tall herbs along the banks of the river navigation. The loss of burrows and feeding habitats have a damaging effect on the Water Vole. Therefore, when any such is work is carried out, careful considerations should be given to minimising the damage to existing Water Vole colonies. This should include, where possible, retaining burrows and reinstating marginal vegetation;

- fragmentation of wildlife populations – Water Voles are poor dispersers and are heavily dependant on good waterside habitats to maintain viable populations The objective should be to prevent fragmentation and encourage the establishment of new colonies. Generally a breeding territory requires 30-50m of waterway bank. The overall length of suitable waterway, showing dense fringes of emergent vegetation should not be less than 500m and preferably in excess of 1km;

- predation by American Mink – it is now well accepted that American Mink is a major threat to Water Voles, but the relation is still poorly understood It is known that the American Mink is more susceptible to the presence of humans than Water Voles, so long as appropriate waterside habitats are retained and managed;

- water quality – Water Voles are relatively tolerant of low water quality, but insufficient is known about the full impacts of differing types of pollution; and

- rodenticides – the use of rat and mouse poisons to control rodents can be detrimental to Water Voles who are equally likely to eat and be killed by the poison

Work can be done to protect Water Voles, including; ensuring that when riverside work and dredging is undertaken, an assessment of Water Voles and their burrows is undertaken to ascertain location and the best form of protection. Disruption, damage or blocking up burrows should be avoided wherever possible, (it is illegal to block or obstruct Water Vole burrows). If it is necessary to affect a burrow system, the minimum requirement should be the fixing of a perforated drainage pipe to provide a new entrance. A recent development has been the "waterhab", which is a pre-constructed timber module that can be placed at the top of steel piling, creating a less confining access for voles than a pipe.

To improve conditions for Water Voles there is a need to improve water quality and reduce pollution within the River Lee Navigation. The Partners are committed to achieving this wherever possible, but will equally expect developers to be committed to ensuring a high water quality.

Much can be done to provide appropriate waterside planting as suitable habitats for Water Voles, and through using edging treatments that are not harmful to Water Voles the damage or loss to burrows and habitats can be avoided. The objective should be to provide a healthy margin of aquatic plants along the water's edge, and a tall sward of vegetation ideally two metres high, which not only provides a good food supply but also gives cover and security from predators.

Maintenance and management of the aquatic margins and grass verges is important. Whilst the offside provides the best habitat, as there is less likely to be disturbance, the towing path side is also of importance. Short swards should preferably kept to the land-ward side of the towing path, leaving as much uncut vegetation along the water's edge as possible. This would not be appropriate adjacent to moorings, where there is a need for boaters to get close to the bank and have easy access to the towing path.

Where rats are a problem, it is important to ensure that there are no Water Voles within the area where poison is to be used, and that correct identification has been carried out. Live capture cage traps are the only safe option and should ideally be used, if there is a risk to Water Voles. Site traps in the open rather in dense vegetation or at the waters edge. Where poison must be used, it should be covered or enclosed in a bait box and placed at least 5 m from the waterway and preferably above ground level.

Birds

Marginal rafts can provide not just marginal vegetation, but also a nesting platform. In order to provide a secluded place suitable for nesting, nesting platforms need to be sited in as inaccessible place as possible which will nearly always be on the off-side.

Bats

The bat population is currently in decline and as a result is a protected species under current legislation The main factors for its decline, include:

- destruction of vegetation along ditches, streams and rivers;
- pollution of ditches, streams and rivers,
- loss of winter roosting sites, and
- loss, destruction and disturbance of other roosts, particularly maternity roosts

It is therefore important to avoid the destruction of vegetation and existing roosting sites along the River Lee Navigation wherever possible. As previously mentioned pollution of the River Lee Navigation should be prevented with the aim of producing a high quality of water.

Creating new places for bats to roost is equally important and the following can be considered:

- **Bat Bricks** Various designs of bat brick are now being marketed. These vary from the handmade bricks from Norfolk Bat Group to the commercial bricks made by various brick companies eg Desimpel (UK) Ltd, Coleford Brick and Tile Company Ltd., Marshalls Clay Products. These bricks are of two main types; those which form a roost in themselves and those which are designed to give access to a larger cavity (eg wall cavities). The first type are suitable for fairly stable environments such as ice-houses, etc. They do not in themselves provide a secure, stable temperature and humidity roost The second type are more appropriate to build into bridges and tunnels, placed in front of an existing cavity or, if none exists, over a specially prepared cavity. This is essential if nursery or hibernation sites are required
- **Bat boxes** have been used with some success as roosting sites and provide a substitute for hollow trees, but should not be used in navigation bridges and tunnels. They are of limited use as nursery and hibernation structures because of the lack of insulation.

The position of bat boxes needs to be very carefully considered They are most valuable when placed on trees in areas with a good feeding habitat, being less successful when placed on buildings as, if suitable, the buildings themselves will be used. Different bat boxes should be erected giving a range of aspects - facing north and south-east to south-west at the same height.

The following are provided as guidelines to the design of bat boxes·

- they should be sited as high as possible, at least 5 m above the ground;
- the ideal size is 10 cm front to back and 12 - 18 cm high;
- the roof should be sloping with a hinged lid secured with a catch,
- wood should be very rough all over to allow bats to grip;
- no wood preservative should be used; and
- use vegetable dies to darken exterior and improve heat absorption.

WATER VOLE

INTRODUCTION

Criminal activity is common and occurs in most situations. Waterways are no different in this respect and can create threatening environments in which the opportunity for crime is relatively easy. Waterways are long linear routes and if development, boundary fences and walls are close up to the towing path or offside path and the waterside, with few access points, this could create an threatening environment for escape.

Official police records indicate that crime is relatively low along the waterways. However, this may not be giving the true picture, as crime figures are based on:

- reported crime;
- crime which may be adjacent to a waterway but may not be recorded as occurring on the waterway, when in fact it was a contributing factor; and
- often a bias in favour of a particular crime and not reflecting the true volume.

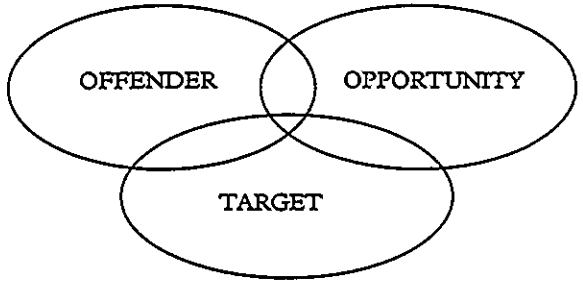
The issue of crime prevention should be addressed at the very outset of all waterside development and improvement schemes to enable full consideration to be given to the safety and security of all proposed waterway features and potential users and ensure the measures implemented are non-intrusive, fully integrated features of the finished scheme.

British Waterways are currently working with the Metropolitan Police Crime Prevention Design Team on a national document which discusses the causes of waterside crime and the role that design, site planning, site management and community involvement can play in reducing such criminal activities. The document is entitled "Under Lock and Quay" and is due to be published shortly. This will provide an important guide for those considering the design of crime prevention within development proposals and will also be used in the assessment of planning applications.

The main issues raised by the document are summarised below. It is recommended, however, that detailed reference is made to the study itself.

Why Crime Occurs

In order to appreciate the reasons behind criminal activity, it is important to understand the crime equation illustrated below:



The diagram shows that if a crime is to be committed, there needs to be a potential TARGET or VICTIM, an OFFENDER and the OPPORTUNITY. By removing one of these three factors, a crime cannot be committed

Most crimes are opportunistic, approximately 85% of all crimes. In order to reduce the OPPORTUNITIES for criminal activity and the FEAR OF CRIME, the following four objectives should always be considered in relation to the River Lee Navigation.

OBJECTIVES

Put the Site User in Control of Their Environment

This can be achieved by:

- giving the site user full visual awareness of the waterway corridor, reducing the occurrence of blind spots such as poorly designed bridge abutments and tunnels or the poor siting of planting belts, behind which offenders can lurk unnoticed
- the creation of user friendly spaces and environments in which a site visitor feels confident and comfortable.
- the creation of sufficient numbers of clearly marked or visible access and bridges The use of distance markers to the nearest access point gives the waterway user a sense of confidence in their environment

Ensure High Levels of Visual Surveillance Along the Waterway

Surveillance of an area will help deter criminal activity; if offenders feel they may be being watched they are less likely to commit crime. Locals, visitors and boaters will also feel more confident in visiting the waterway if they know there are other people around at the same time. Surveillance may take the form of:

- informal surveillance by waterside users, boaters, anglers, passers by, adjacent residential and business users;
- organised, yet informal, surveillance through schemes such as Neighbourhood Watch, Boat Watch etc.;
- formal surveillance through the use of Closed Circuit Television Cameras (CCTV). This type of surveillance is usually employed on sites with high rates of criminal activity, but it is now increasingly being considered in

relation to waterside sites where safety is a known problem. CCTV may also be required where crime is a 24 hour a day issue yet surveillance from adjacent developments is only present during office hours. Formal waterside surveillance may also be undertaken by patrolling bailiffs and British Waterways Patrol Officers; and

- install lighting where necessary, particularly where a site is used for legitimate purposes eg commuting after dark.

Instil a Sense of Ownership/Understanding of the Waterway Environment

Much criminal activity for example vandalism, graffiti and wilful damage, results from a lack of interest and respect for the waterway environment. Community action groups which actively work towards improving the waterway environment, create a sense of ownership and pride in the waterway which can potentially reduce the levels of criminal activity. There are already many such groups with a keen interest in the waterways and their enthusiasm should be encouraged.

Both British Waterways and the police undertake education programmes in conjunction with schools and such programmes should be encouraged.

Remove the Means to Commit the Crime

Waterways and their surroundings frequently offer the offender the raw material with which to commit crime eg bricks, metal posts, graffiti tolerant walls, inflammable structures and poorly maintained paving Through careful selection of site furniture and materials, and good maintenance, the incidence of damage may be substantially reduced.

THE ROLE OF SITE PLANNING AND DESIGN

It is generally recognised that the best form of crime prevention is to eliminate or reduce the potential for crime in the planning and design stage of development. This is supported in a government circular, issued in 1994, entitled "Planning Out Crime".

Site planning is a fundamental stage in the design process during which the end use of a site and its layout are resolved. Through careful site planning and design, levels of waterside related crime and the need for extreme site security measures such as high level security fencing and CCTV, can be substantially reduced.

It is British Waterways and London Metropolitan Police experience that the most successful and safe waterside areas are mixed use developments with buildings and spaces overlooking the waterway and are accessed from the towing path providing natural surveillance and policing

Careful siting and orientation of buildings and their relationship with adjacent areas of open space can also help improve natural surveillance, improve site lines and reduce the occurrence of blind spots.

The location of access points and pedestrian footpaths can inadvertently increase the potential for unlawful entry to buildings. For example the existing waterside treatment to the offside of the River Lee Navigation which deters mooring and pedestrian access effectively reduces opportunities for intrusion to adjacent industrial premises.

The scale of the proposed built form is an important factor in creating a "comfortable" waterside environment which does not overpower the site user of make them feel vulnerable to attack.

The choice of site materials at the detail design stage can also help to achieve the objective of removing the means to commit a crime and the following should be considered:

- avoid specification of easily dismantled materials. Use below ground fixtures for items such as benches, bollards and lighting,
- the use of fire resistant materials where possible and appropriate;
- backless seating with intermediate arm rests to avoid loitering and inappropriate use;
- graffiti resistant surfaces such as textured walls or graffiti resistant paint;
- wall mounted lighting to the offside of the navigation out of reach of potential offenders; and
- avoid specification of litterbins in close proximity to high profile sites eg due to risk of planting of incendiary devices.

Maintenance and Management

Poor site management can exacerbate the problem of crime particularly that of vandalism and graffiti For example, if the results of vandal activity are not removed from a site it is implies that there is a general lack of interest and pride or care for the area and further criminal acts are likely to follow.

A site management regime should include such operations as graffiti clearance, litter removal, replacement and repair of damaged structures.

Community Involvement

An understanding and interest in waterway history and ecology can promote greater respect for the waterway environment as a whole. Increasing public awareness of these issues can be through the use of information boards, community action groups, lectures and activity days.

Development and Open Spaces

The principles of good residential and industrial design, and mixed use development, should be followed (refer to Sections 8.3, 8.4 and 8 5). These principles are based on the four objectives of crime prevention, and will significantly reduce the likelihood of crime being committed where developments abut the River Lee Navigation.

CRIME PREVENTION

Boundary Treatments

Traditionally waterside developments have turned their backs on the river navigation, preferring to fence off the waterspace from inhabitants and users alike. Such developments often created the type of conditions now considered unsafe - high solid fences and walls. However, with careful design much can be done reduce crime (refer also to Section 8.12 Principles for Boundary Treatments), for example:

- for premises on the offside of the river navigation much can be done to use the water as a moat. Access is denied without recourse to a fence. Land modelling and deterrent planting can provide additional protection;
- re-landscaping schemes provide the opportunity to design out crime by ensuring there are no places to lurk, or provide cover for an ambush and that recessed areas are avoided;
- introduction of lighting which can make walkways appear safer and more secure. Every opportunity should be taken to light the waterside from adjoining premises, or existing structures. In many cases low level lighting can be incorporated with other service facilities, eg service bollards/pods.

However, it is important to stress that security measures taken by building owners are considered in the context of the risk to the users of the waterway. The use of revolving "cacti" spikes or razor tape should only be suggested as a last resort for existing premises with particular problems or within an extremely high risk area.

Design Considerations

Development proposals should consider the following design issues:

- reduce the need for excessive security measures;
- increase the need for visual surveillance,
- reduce the opportunity for unlawful entry into property;
- ensure external works are detailed so as to be secure and vandal-proof;
- retain waterside character,
- encourage mixed use, incorporating uses that will use waterway over a 24 hour period;
- locate buildings and open space so that they overlook a waterway, so as to provide natural surveillance;
- avoid blind spot, where people can lurk;
- avoid buildings that create an oppressive character;
- establish good pedestrian circulation, with plenty of access points, preferably illuminated. Construct bridges to maintain circulation;
- encourage pedestrian generating activity along the waterfront, to provide natural surveillance; and
- encourage greater visual access.

INTRODUCTION

The waterway network passes through rural and urban areas, providing direct access to water. Water provides a distinctive feature and attraction, but brings with it inherent risks and dangers. Roughly 75% of all drownings take place in inland waters of which, in 1992, 9% occurred in canals

Preventing access to the watersides of river navigations and canals is impracticable, unreasonable and unworkable. The objective is to make users aware of the risks and design out risks and hazards, or minimise, wherever possible Where it is not possible to remove unacceptable risks or hazards by design, appropriate prevention measures should be provided.

The partner organisations are committed to providing a safe attractive environment for users of the Lee Navigation and surrounding areas. The Partners will seek to ensure that within their powers the River Lee Navigation is a safe place to use. As part of this it will require developers and other organisations undertaking improvements to ensure that there are good water safety principles and standards incorporated into their designs. As such the following guidelines are provided to assist in this process. Furthermore British Waterways will be happy to assist in providing more specific guidance relating to a particular development or improvement.

As part of the process of ensuring a high water safety standards, developers and other organisations will be required t undertake a User Safety Assessment. The purpose should be to ensure that there is a safe environment along the waterside for both waterway users and the general public, whether invited or not. This submission will be the subject of acceptance or otherwise by the Chief Safety Engineer of British Waterways This will be a two stage risk assessment process - an assessment of any outline proposals and a more comprehensive assessment of detailed design proposals. Early discussions with British Waterways are strongly recommended

Some of the issues a User Safety Assessment may consider include the following

- the likely risks and hazards that may be encountered by users,
- consideration of how risks and hazards can be eliminated or minimised through planning and design,
- preventative measures to reduce risks and hazards;
- consideration of the effect of incorporating safety measures and the impact it may have on other waterway issues;
- means of summoning assistance from and access for the emergency services,
- prevention of accidental immersion;
- immediate rescue facilities for those in the water, and
- appropriate design details and signage to satisfy the requirements and recommendations of British Waterways Safety Officer and RoSPA.

General Principles

- Safety issues should be considered at the outset of any project, and should be fully incorporated into the design stage, as well as ideally a revaluation and monitoring of safety issues once implemented.
- The use of the waterside by the general public is to be carefully assessed in terms of the numbers, the activity and the level of responsibility/supervision of those who may be reasonably anticipated to use the area.
- Level changes which present a safety hazard should have railings or bollards and chain to a consistent approved design, fixed to the waterway wall.
- Designs should take account of the flood risks and shall allow access to flood defence structures where required by the Environment Agency.
- The siting and accessing of any new buildings within lockside areas must minimise conflict with lock operation equipment. The siting and access to new buildings within the lockside area must also take account of British Waterways' additional space requirements of allowing crane access in the event of boat on fire within a lock pound

PLANNING AND DESIGN

Risks and hazards can be eliminated or minimised at the planning and design stage, through considering, for example, the following.

- preventing vehicular access, wherever possible, except for emergency vehicles and access to slipways;
- routes, access points, and open space along the navigation;
- use of planting to deter access to the water, while still incorporating the principles of good crime prevention;
- selective use of lighting in urban area and where appropriate to light unsafe areas,
- when designing moorings avoid·
  - ropes that trail across the towing path;
  - taps that allow water to spill across the towing path;
  - mooring bollards and rings which can be easily tripped over; and
  - wherever possible, within mooring basins and marinas, locating moorings close to a publicly accessible waters edge;
- where pontoons are used for moorings, access should b restricted to boat owners, through the use of controlled access points. This will not only improve crime prevention, but will also increase water safety; and
- controlling and directing the public along the waterway. For example·
  - only creating new access point where sufficient space,
  - avoiding narrow pinch points for the location of facilities,
  - deliberately attracting visitors, through design, to one location as opposed to another, thereby minimising access to more hazardous areas; and

LIGHTING

- diverting footpaths away from hazards and using deterrent paving or planting to keep visitor safe.

Waterside Barriers

Waterside railings or barriers should only be used where necessary. These are most likely to be used where there is a high risk of falling into the water, or where there is pressure from users, within a restricted space, along the waterside.

They should be capable of preventing persons falling into the water or onto moorings, without causing a visual intrusion to the waterside setting. Equally, they should be designed to create an attractive element that integrates well with river setting and other external features

The use of barriers will be influenced by what is happening on the water, and whether boat access is also required to the quayside, lockside or waters edge, for leisure or maintenance purposes. Few waterside barriers need to be higher than 1.2 m and in design terms should ensure views across the river navigation are not restricted.

Some removable railings and posts should be incorporated for the purposes of allowing maintenance of the waterway wall or any mooring equipment.

Lighting

Lighting can improve safety and crime prevention along the waterside. However, it can also increase light pollution and further urbanise a location. This may be an important consideration in a semi-rural or rural location. As such lighting should be carefully considered and provided, where use of the waterside is required, or is beneficial during the hours of darkness It should also be capable of improving safety without there being a detrimental effect on the visual qualities of the river setting.

Lighting should be designed in accordance with the guidance set out within Section 8.10 Waterside Furniture.

Signage

Care should be taken to avoid the over use of signs as these often add visual clutter and are not as beneficial as other forms of safety measures Prevention of risks and hazards through planning and design should always be undertaken first, and where other measures would not be appropriate. Signs should be simple but give sufficient information to be of benefit to the users and be aimed at the appropriate user.

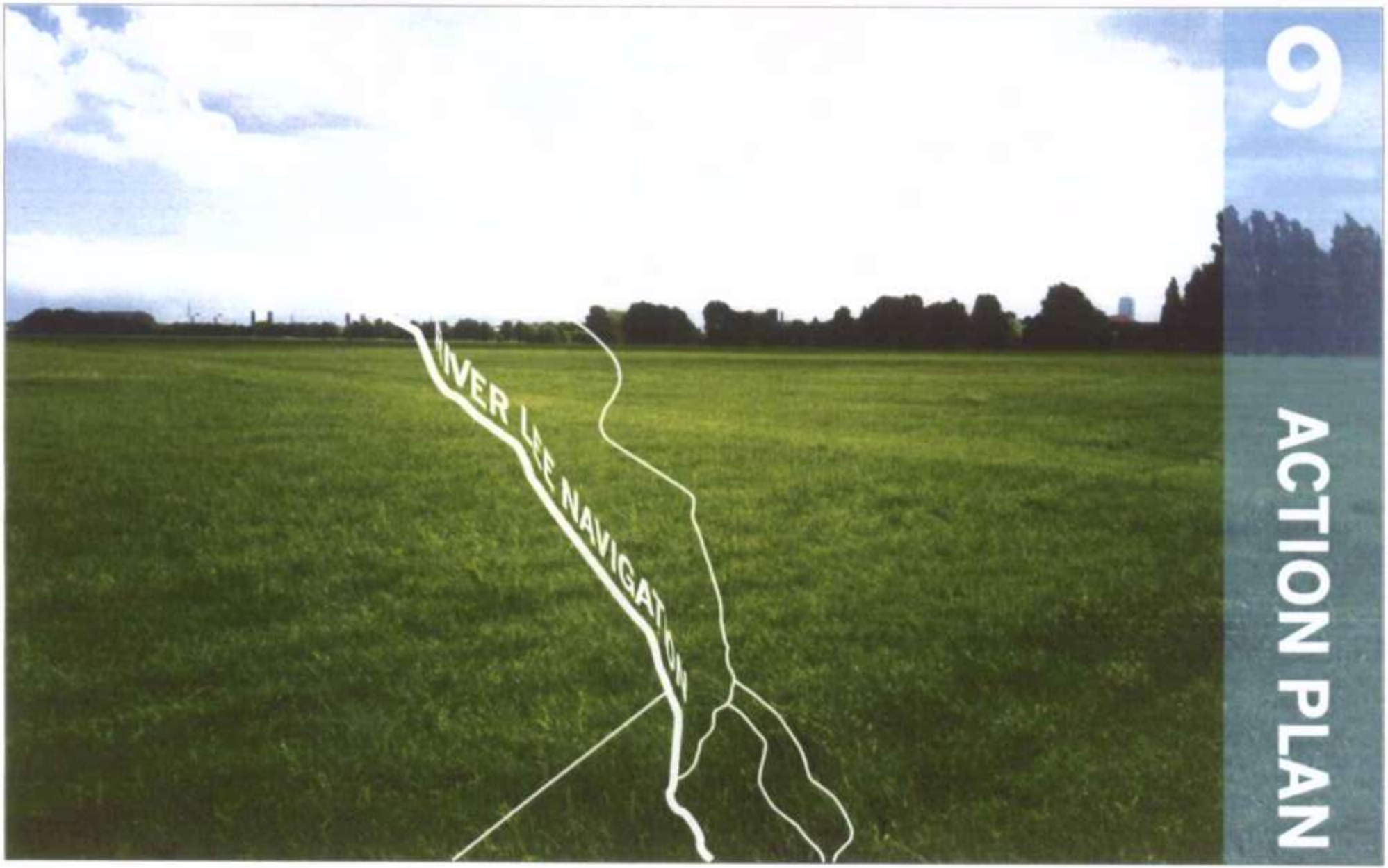
Signs should be designed in accordance with the guidance set out within Section 8.10 Waterside Furniture

Life Saving Equipment

Safety equipment should only be considered as a last resort when risk and hazards cannot be reduced to an acceptable level Safety equipment can be very important and assist in saving lives. However, it depends on someone witnessing an accident, knowing what to do and having the ability to use the equipment without endangering themselves.

Equipment may include life buoys, reach poles and throws, and rocket lines. These are often susceptible to vandalism and as such should only be used where there is likely to be a low level of vandalism or is in a well managed area.

Life saving equipment where provided or deemed necessary should ensure its visual consistency with hard landscape details and other elements of waterside furniture (refer to Section 8.10 Waterside Furniture).


9
ACTION PLAN

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	AQUATIC PLANTING						
	1	Vertical, hard bank protection restricting the opportunity for emergent vegetation to become established Collaborate to create emergent planting opportunities along this section – Springhill to Horse Shoe Bridge.					
	2 3	Retain and extend areas of native aquatic and emergent vegetation through appropriate management and planting schemes.					
	4 5	Extend existing areas of emergent vegetation and seek to create new areas of emergent vegetation in suitable areas, eg where the channel widens.					
	6	Survey the submerged aquatic vegetation and manage accordingly.					
	7	Encourage damselflies and water birds by creating suitable habitats.					
	8	Seek to create new areas of emergent vegetation in suitable areas.					

Total cost of Aquatic Planting	

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	BOUNDARY IMPROVEMENTS						
	1	An attractive and sensitively designed brick wall to be built around Middlesex Wharf. It will link into the existing brick wall and replace the unsightly wooden boarded security fence.					
	2	The riverside strip along the boundary with the former CEGB Power Station site should be imaginatively landscaped as a riverside promenade linking Hackney Marsh with South Millfields Recreation Ground. If the former power station site remains in use as a refuse collection site then some sort of screening should be incorporated along the boundary between the former power station site and the riverside promenade.					
	3	The offside river edge piling along this stretch is in a state of disrepair. It needs repairing and tidying up.					
	4	Timber bollards should be installed as the boundary markers between the towpath and Arena Fields rather than the existing hit and miss metal fencing and trip rails to create a more open and manageable interface between the two areas.					
	5	To the south of Arena Fields along the towpath boundary there is an unsightly breeze block wall which could be painted and possible used for a mural or even demolished and replaced with a brick wall to match the buildings on the offside.					
	6	The frontages to the warehouses on the offside of this stretch are very uninspiring and do not make use of their riverside location. The warehouse owners should be encouraged to use their available strips of land next to the river as riverside open space where their workforce can go and sit outside during breaks. This would increase surveillance along this more enclosed stretch of the river.					

Total cost of Boundary Improvements

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	GRAFFITI TREATMENT						
	1	The footbridge between Springfield Marina and Springfield Park is suffering from some graffiti damage on the brickwork. It is recommended that this is cleaned off and at the same time, the metal structure of the bridge is repainted.					
	2	Horse Shoe Bridge has some graffiti damage on the brickwork. It is recommended that this is cleaned off and at the same time, the metal structure of the bridge is repainted.					
	3	The viaduct is covered in places with graffiti which needs to be cleaned off					
	4	Middlesex Wharf Footbridge is suffering from some graffiti damage on its stonework and metalwork. It is recommended that the stonework is cleaned and the metalwork is repainted.					
	5	Lea Bridge has some graffiti damage on its brickwork and metalwork. It is recommended that the graffiti is cleaned off.					
	6	The brick pillars at the entrance to the Middlesex Filter Beds Nature Reserve are covered in graffiti which needs cleaning off.					
	7	Cow Bridge has some graffiti damage on its concrete walling. Depending on the future of the bridge, as at present it is shut off to vehicular traffic due to structural fears, it is recommended that the graffiti is cleaned off and a painting scheme is looked at for the bridge.					
	8	The footbridge at this location is covered in graffiti. It is recommended that the whole of the concrete and brickwork on the bridge is cleaned to remove the graffiti and rust stains					
	9	Marshgate Bridge only has a small amount of graffiti on its brick and stonework but this should still be cleaned off.					

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	GRAFFITI TREATMENT						
	10	The A102(M) underpass is suffering quite badly from graffiti damage on its concrete walling and pillars. In conjunction with Recommendation 2 under Sports / Leisure Facility Improvements (Section 6.3) for a BMX / Roller Blading adventure arena, it is recommended that a local community artist works with the local youth groups in creating a series of murals for the concrete walling and pillars.					
	11	The enclosed concrete footbridge between Gainsborough Primary School and Arena Fields is, at its base, suffering from a lot of graffiti damage At present this bridge is locked and disused. With this in mind, it would be better to look at the bridge's viability rather than waste money cleaning it up					
	12	To the south of Arena Fields along the towpath boundary there is an unsightly breeze block wall which has some graffiti damage. In conjunction with Recommendation 5 under Boundary Improvements (Section 6.2) for a painting scheme on this wall or a new wall, it is recommended that the little graffiti there is, is left until the wall's future is determined.					
	13	The Hackney Wick Railway Bridge is very badly covered in graffiti. It is recommended that the brickwork is cleaned up and that the metalwork is repainted. Also Carpenters Road Bridge is suffering from some graffiti damage. It is recommended that the graffiti on the concrete, brickwork and metalwork is cleaned off					
	14	At Old Ford Locks the metalwork on the locks, bridges and railings is suffering from graffiti damage. It is recommended that as a face lift for the locks, all the metalwork on all the associated structures is repainted.					

Total cost of Graffiti Treatment

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	HERITAGE FEATURE IMPROVEMENTS						
	1	The old pair of stop gates at Lea Bridge are starting to get vegetation growing in their stonework as well as grass growing amongst the stone setts As part of ongoing management of this feature, the vegetation needs to be removed as soon as possible. Also between the stop gates and Lea Bridge there is an old iron towpath bridge which is now the only indicator of an old wharf. In the future it would be good to look at the viability of opening the wharf up again to some degree.					
	2	To many the old CEGB Power Station is an eyesore and blight on the landscape. It is worth considering though that many such buildings around the country have been transformed into major attractions One such building, but on a much larger scale is the former Battersea Power Station which is now home to the Tate Modern on the banks of the River Thames. This building has a beautiful setting on the banks of the river and thus a prime location for new waterside based leisure facilities. In the future of this site it is worth considering this building as a heritage feature / community landmark!					
	3	Between the junction with the Hertford Union Canal and Old Ford Locks lie three raised platforms in the towpath where trains once loaded and unloaded their goods onto and off the barges. These insights into the canal's working past need to be maintained in their present good condition for all to appreciate					
	4	Old Ford Locks is the only lock along this stretch and provides quite a focal point with the navigation rejoining the Old River Lea, the surrounding old warehouses and the not so historical Big Breakfast TV Studio. It is proposed that the landscaping and historical structure of the locks is enhanced and promoted as a focal point along the corridor.					

Total cost of Heritage Feature Improvements

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	LANDSCAPE & HABITAT CREATION						
	1	Collaborate to undertake terrestrial planting in order to make the west side walk more aesthetically pleasing.					
	2	Encourage vegetation (eg ivy) on viaduct walls which will increase bird and invertebrate habitat whilst deterring graffiti					
	3 5	Plant vegetation (eg ivy) on towpath boundary walls to improve the visual quality of the area and provide habitat for birds and invertebrates					
	4	Investigate the opportunities to create grassland and wetland habitat on suitable areas of Hackney Marsh in order to widen the wetland corridor.					
	6	Liaise with offside industry to encourage suitable offside planting (eg ivy) on the bare walls.					

Total cost of Landscape & Habitat Creation	

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	LANDSCAPE & HABITAT IMPROVEMENTS						
	1	Survey Horse Shoe Island in Springfield Marina and manage accordingly, with the aim to maximise benefit for wildlife, eg if suitable put up bird and bat boxes					
	2	Seek to undertake effective control of the alien giant hogweed and floating pennywort before they expand further.					
	3	Collaborate to improve the diversity of towpath verges and thereby improve the visual impact of the area.					
	4	Survey the offside area of soft bank at Essex & Eastwood Wharf and South Millfields for mammals and manage accordingly, with the aim to maximise benefit for wildlife.					
	5	Seek to undertake effective control of the alien giant hogweed, floating pennywort and Japanese knotweed before they expand further.					
	6	Collaborate to undertake management of areas of South Millfields next to the riverbank for the benefit of wildlife, thereby widening the navigation corridor.					
	7	Seek to undertake effective control of the Japanese knotweed and duckweed before they expand further.					
	8	Collaborate to investigate the feasibility of enhancing for the benefit of wildlife, the grassland of Hackney Marsh adjacent to the Lee Navigation.					
	9	Seek to undertake effective control of the Japanese knotweed, duckweed and algae before they expand further					
	10	Through partnership, review the management of Arena Field and implement methods to enhance the biodiversity of the area where appropriate.					
	11 12	Increase diversity of verges adjacent to the industrial parks by reviewing the towpath management regimes and adopting a method of practice to promote floristic diversity.					

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	LANDSCAPE & HABITAT IMPROVEMENTS						
	13	Collaborate on methods of increasing the biodiversity in the area especially linking in with Old Ford Nature Reserve and the Greenway.					

Total cost of Landscape & Habitat Improvements

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	PUBLIC ART						
	1 2 3 4 5	There is considerable scope for the use of public art to raise the profile of the navigation, to announce the river's presence from key roads and help to create more inviting entrances to the river corridor. Such key focal points would include Springfield Park / Springfield Marina, Lea Bridge Road / Millfields Recreation Ground, Cow Bridge Changing Rooms, Marshgate Bridge / Wick Woodland / Gainsborough Road Bridge and Old Ford Locks. Interpretation and signage could be integrated as part of a public art programme serving as gateway markers to the navigation. The markers should be robust designs which are vandal resistant and preferably placed at points that are inaccessible. See Recommendations 1-10, Interpretation (Section 6.3) and Recommendations 1-10, Signage (Section 6.5).					

Total cost of Public Art	

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	CAFÉ / PICNIC AREA						
	1	There is an existing café at Springhill but the upgrading and modernisation of this facility would be of benefit to all at this strategic focal point.					
	2	In conjunction with Recommendation 1 - New Waterside Based Leisure Facilities (Section 6.3) for a new waterside focal point and visitor attraction at Essex and Eastwood Wharf, a new café would be of great value as part of this development within the bend of the river overlooking North Millfields Recreation Ground.					
	3	In conjunction with Recommendation 2 – New Waterside Based Leisure Facilities (Section 6.3) for a waterside focal point and visitor attraction on the former CEGB Power Station site, a new café would be of great value as part of this development.					
	4	There is an existing picnic area at Cow Bridge changing rooms but the upgrading and enhancement of this facility would be of benefit to all at this strategic location in the Hackney Marshes and it will lie next to the Lee Valley Pathway when completed.					
	5	Marshgate Bridge acts as a strategic entrance point to both Hackney Marshes and Wick Woodland, yet the visitor facilities at this location are non-existent. In conjunction with Recommendation 10 - Access Point Improvements (Section 6 5) for the upgrading of this access point, a picnic area at this location could become very popular. It will lie next to the Lee Valley Pathway, next to a major access point and will be situated within some wonderful parkland.					
	6	In conjunction with Recommendation 3 – New Waterside Based Leisure Facilities (Section 6.3) for a waterside focal point and visitor attraction on the junction with the Hertford Union Canal, a new café would be of great value as part of this development.					

Total cost of Café / Picnic Area	

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	COMMUNITY BOAT / FLOATING CLASSROOM						
	1	A community narrowboat / floating classroom to serve this stretch of the canal would be beneficial to all. This could be used for education purposes linked with the local schools and youth groups, as well as for promotion to engender business support for the river environment. The Lower Lea Project already work with local communities on the river with their boat the 'Pride of Lee'. With such a resource at hand it would only be sensible to liase with the Lower Lea Project and discuss how their services could possibly be widened.					

Total cost of Community Boat / Floating Classroom

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	INTERPRETATION						
	1 2 3 4 5	There is very little interpretation along this stretch of the River Lee Navigation, with what little there is either on the whole out of date or graffiti damaged. In conjunction with Recommendations 1-5 – Public Art (Section 6 2) for new public art schemes and Recommendations 1-10 – Signage (Section 6.5) – Interpretation, Signage and Public Art could all be integrated as one programme serving as gateway markers to the river corridor.					
	6 7 8 9 10	The interpretative information should always include present location, context map, points of interest and relevant factual information (eg History, Wildlife, Ecology, Local Interest etc). The key locations for interpretative information are Springhill / Springfield Park, Horse Shoe Bridge, Middlesex Wharf Footbridge, Lea Bridge, Friends Bridge / Middlesex Filter Beds Nature Reserve, Cow Bridge, Marshgate Bridge, Gainsborough Road Bridge, Carpenters Road Bridge and Old Ford Locks. The project should include off-site interpretation of the river corridor from Hackney Wick Station and Clapton Station, with a trail leading the visitor to the waterway. This could comprise an artwork motif, eg of a narrowboat, set into the pavement or boundary walls on the route from the stations					

Total cost of Interpretation	

Map Ref No.	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	NEW OR IMPROVED MOORINGS						
	1	In conjunction with Recommendation 1 – New Waterside Based Leisure Facilities (Section 6.3) for a new waterside focal point and visitor attraction at Essex and Eastwood Wharf, it is recommended that as part of this development new visitor moorings should be considered					
	2	In conjunction with Recommendation 2 – New Waterside Based Leisure Facilities (Section 6.3) for a new waterside focal point or Recommendation 1 – Waste by Water (Section 6.6) for a waste transfer site on the former CEGB Power Station Site, it is recommended that new improved mooring facilities are integrated into the new development either as visitor moorings or mooring point for the waste transfer boats.					
	3	In conjunction with Recommendation 5 – Café / Picnic Area (Section 6.3) for a new picnic area, it is recommended that informal visitor moorings are located at this site.					
	4	In conjunction with Recommendation 3 – New Waterside Based Leisure Facilities (Section 6.3) for a water based leisure facility, it is recommended that new visitor / residential moorings are included as part of the development.					

Total cost of New or Improved Moorings

Map Ref/ No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	NEW WATERSIDE BASED LEISURE FACILITIES						
	1	An attractive and sensitively designed waterside leisure facility at Essex and Eastwood Wharf to be developed as a new focal point and visitor attraction with the decontamination and opening up of the infilled oxbow immediately to the north to create a new waterside location for recreational use. See also Recommendation 1 – New or Improved Moorings (Section 6.3) for new visitor moorings and Recommendation 2 – Café / Picnic Area (Section 6.3) for a new café, both for this location.					
	2	An attractive and sensitively designed waterside leisure facility on the former CEGB Power Station site to be developed as a new focal point and visitor attraction being integrated with Cow Bridge and South Millfields Recreation Ground. The old power station itself should seriously be considered as a focal point to this development. For an alternative use for this site, see Recommendation 1 – Waste by Water (Section 6.6) for a waste transfer site. In connection with this development, see also Recommendation 2 – New or Improved Moorings (Section 6.3) for new and improved visitor or waste transfer moorings and Recommendation 3 – Café / Picnic Area (Section 6.3) for a new café.					
	3	An attractive and sensitively designed waterside leisure facility on the junction of the Hertford Union and the River Lee Navigation to be developed as a new focal point and visitor attraction See also Recommendation 4 – New or Improved Moorings (Section 6.3) for new visitor / residential moorings and Recommendation 6 – Café / Picnic Area (Section 6.3) for a new café, both for this location.					
	Total cost of New Waterside Based Leisure Facilities						

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale / Priority	Outline Cost	Comments
	RESTAURANT BOAT						
	1	In conjunction with Recommendation ___ - Hard Landscaping (Section 6.2) for the enhancement and promotion of Old Ford Locks as a waterway focal point, it is recommended that a restaurant boat could be based on the offside of the locks.					

Total cost of Restaurant Boat	

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	SPORTS / LEISURE FACILITY IMPROVEMENTS						
	1 2	The upgrading and modernisation of recreational and water based facilities at Springhill and Leaside to be supported where these increase the level of participation and where they are sensitively designed and located to minimise impact on the landscape and ecological interest of the area					
	3	The underpass beneath the A102(M) could be developed as a skate park, with the lack of such facilities in the area. Any such development should be made in close consultation with the local youth clubs					

Total cost of Sports / Leisure Facility Improvements

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	TRIP BOAT						
	1	With ongoing redevelopment of the Lee Valley and rising profile as one of the major green lungs of London, more visitors can be expected in the future, giving rise to the increased need for river trips. Already in existence is the 'Pride of Lee' trip boat run by the Lower Lea Project. It would have to be investigated to see if this service could cater for an increased need for trips up and down this stretch of the River Lee or whether a new trip boat would have to be considered, possibly based at Springfield Marina.					

Total cost of Trip Boat

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	GUARDIANS ON THE WATERWAY						
	1	A Canal Ranger for this stretch of the River Lee Navigation would provide a port of call for the local community regarding any canal matters, an educational resource for the local community and of course a pair of ears and eyes known to be patrolling the canal. In connection with this, a scheme to have 'lollipop type' wardens on the canal during the times for travel to and from school would provide a safe and fun commuter route for school children. These might be provided through a parents' volunteer rota or as a paid part-time post or possible as part of a Canal Ranger's duties The validity and need for such a scheme would first have to be check out in close consultation with local schools.					

Total cost of Guardians on the Waterway

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	HIDDEN CORNER IMPROVEMENTS						
	1 2 3 4 5 6	Lea Bridge, Cow Bridge, Daubeney Road Footbridge, Marshgate Bridge, A102(M) Road Bridge, Gainsborough Road Bridge, Hackney Wick Railway Bridge and Carpenters Road Bridge all have blind spots / hidden corners where potentially an undesirable can lurk unnoticed. These hidden corners are one factor in the local communities perceived fear of crime. They should be eliminated through new landscape design schemes, thus stopping an undesirable from lurking unnoticed and hopefully reducing the fear of crime along this stretch.					

Total cost of

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	STRUCTURE LIGHTING						
	1 3 6 7 8 9 10 11	Dark enclosed spaces lead to a fear of crime, which is presented along this stretch of the River Lee Navigation by pedestrians having to walk beneath bridges at night. This can be tackled by installing lighting on the underneath of Springhill Footbridge, Lea Bridge, Cow Bridge, Daubeney Footbridge, Marshgate Bridge, A102(M) Road Bridge, Gainsborough Road Bridge, Hackney Wick Railway Bridge, Carpenters Road Bridge and the proposed footbridge across the Hertford Union Canal.					
	2 4 5 12 13	To improve on surveillance and security, every opportunity should be taken to light the waterside from adjoining premises, or existing structures in areas of potential high use This can take the form of actually lighting the façades of existing structures which can make walkways appear safer and more secure, as well as creating focal points along the waterway. This could be done on the warehouses in Middlesex Wharf, the former pair of stop gates, the former CEGB Power Station, the offside warehouses south of the Hertford Union Canal and Old Ford Locks.					

Total cost of Structure Lighting

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	WINDOWS ONTO THE WATERWAY						
	1	It has been British Waterways' experience that the most successful and safe waterside developments overlook the waterway providing natural surveillance and policing. The industry in Ziam Industrial Estate, Leeside Wharf on the offside all have their backs to the waterway with no surveillance at all over the Lee. It would be beneficial to collaborate with these industries to influence any future redevelopment plans into considering facing the waterway.					
	2	In conjunction with Recommendation 1 – New Waterside Based Leisure Facilities (Section 8.3) for a new waterside focal point and visitor attraction at Essex and Eastwood Wharf, it is recommended that through the planning process British Waterways seek to obtain a development which fronts the navigation with buildings and spaces overlooking the waterway providing natural surveillance and policing.					
	3	In conjunction with Recommendation 2 – New Waterside Based Leisure Facilities (Section 8.3) for a new waterside focal point on the former CEGB Power Station site, it is recommended that through the planning process British Waterways seek to obtain a development which fronts the navigation with buildings and sprees overlooking the waterway providing natural surveillance and policing					
	4 5 7	There is a lot of industry along the southern part of this stretch of the River Lee Navigation Unfortunately these industrial developments have created a negative approach to the River Lee Navigation by on the whole placing their backs along the river Service Yards, storage areas etc, are often situated on the riverside together with security fencing and wall. It is important that over the long term change is sought to get these industries to front the waterway providing natural surveillance and policing as well as a more aesthetic view It is recognised that industrial developments on the towpath will more often than not still need a security barrier A permeable attractive fence allowing surveillance can still be an effective security measure. All this needs to be sought through close consultation with the industries on future planning, design and management issues					

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	WINDOWS ONTO THE WATERWAY						
	6	In conjunction with Recommendation 3 – New Waterside Based Leisure Facilities (Section 8.3) for a waterside focal point on the junction of the Hertford Union and the River Lee Navigation, it is recommended that through the planning process British Waterways seek to obtain a development which fronts the navigation with buildings and spaces overlooking the waterway providing natural surveillance and policing.					

Total cost of Windows onto the Waterway	

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	ACCESS POINT IMPROVEMENTS						
	1 2 3 4 5 6 7 8 9 10 11 13 14	This stretch of the River Lee Navigation has a very high proportion of cross towpath and access to the towpath barriers. The main purpose of these barriers is the prevention of motorcycles from entering the towpath. Unfortunately the majority of these barriers also significantly disadvantage access to other legitimate towpath users, namely the disabled, cyclists, parents with buggies etc. In view of this it is strongly recommended that all of these barriers are looked at to assess their validity / usefulness, with the redundant ones removed and the others replaced with a common design which caters for the legitimate towpath users who are presently disadvantaged by the existing barriers.					
	5	This access point to the towpath from Hackney Marsh Changing Room Car Park presently necessitates the user to walk up or down a grassy embankment, which can get slippy or overgrown. Steps need to be put in between the towpath and the top of the embankment to provide safe access.					
	6	Cow Bridge is presently closed off to vehicular traffic, but still allows pedestrian access. This leaves the Hackney Marsh Changing Rooms fairly redundant, with its car park slowly becoming overgrown with no vehicular use. The future of this access point needs looking into as to whether vehicular access is considered a viable future option or whether this point will now only be a pedestrian access point and action taken accordingly.					
	10	Marshgate Bridge should be seen as a key focal point entrance to the navigation with Hackney Marsh and Wick Woodland all lying adjacent to this point and upgraded / improved in view of this.					
	11	Gainsborough Road Bridge entrance to the navigation should be upgraded / improved to take into account its strategic location with links to Wick Woodland and Arena Field / Hackney Stadium.					

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	ACCESS POINT IMPROVEMENTS						
	12	Presently between Arena Field and the East Cross Centre there is an informal access route from the towpath to Hackney Stadium. This route should be looked at for improvements especially if Recommendation 4 – New Access Points (Section 8.5) for a new pedestrian link between Hackney Wick Station and the towpath comes about, meaning that the access route from the station to the stadium would follow this present route					
	13	Carpenters Road Bridge should be seen as a key focal point entrance to the navigation with its present links to Hackney Wick Station, Hackney Stadium and the Hertford Union Canal and upgraded / improved in view of this.					
	14	Old Ford Locks should be seen as a major key focal point entrance to the navigation with its present links to the Big Breakfast TV Studio, the Greenway and the Old River Lea, and upgraded / improved in view of this.					

Total cost of Access Point Improvements

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	NEW ACCESS POINTS						
	1	Presently there is a cycle and pedestrian path on the offside going from Cow Bridge to South Millfields. Unfortunately this path stops dead when it reaches South Millfields and there is then no access path across South Millfields to join up with an existing cycle / pedestrian path travelling east / west across South Millfields. The instatement of this link would join together the existing path network and not leave one path going nowhere.					
	2	Between the towpath and Hackney Marsh there is a fence with very few access points between the two. In places there has been vandalism, knocking down the fence, thus allowing free access between them. In view of this, one or two new access points should be instated between the towpath and Hackney Marsh.					
	3	Between Marshgate Bridge and the A102(M) Road Bridge there is no access between the towpath and Wick Woodland. It would make sense to provide a link between the towpath and the central ride running through the middle of Wick Woodland.					
	4	Presently there is no direct link to the towpath from Hackney Wick Station This would be quite feasible through a new pedestrian bridge leading from the end of the platform over the navigation to the towpath. In conjunction with Recommendation 12 – Access Point Improvements (Section 8.5) for a link between the towpath and Hackney Stadium, this proposed pedestrian bridge would provide an important link between the station and the stadium.					
	5	In conjunction with Recommendation 3 – New Waterside Based Leisure Facilities (Section 8.3) for a new focal point and visitor attraction on the junction of the Hertford Union Canal and the River Lee Navigation, there would have to be a link between this and the navigations. To achieve this, a pedestrian bridge would have to be built, preferably across the Hertford Union Canal to the towpath					
	Total cost of New Access Points						

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	SIGNAGE						
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Signage is virtually nonexistent along this stretch of the River Lee Navigation, with what little there is mainly found on the Walthamstow Marshes. In conjunction with Recommendations 1-5 – Public Art (Section 8 2) for new public art schemes and Recommendations 1-10 – Interpretation (Section 8.3) for interpretative schemes, Interpretation, Public Art and Signage could all be integrated as one programme serving as gateway markers to the river corridor. The directional signage will need to be placed at all entrance points to the navigation (next to the canal towpath and at road / street level). Each sign will need to state the walking distance to the next access / exit point and any points of interest. The key locations for directional signage are Springhill / Springfield Park, Horse Shoe Bridge, Walthamstow Marshes Viaduct, Middlesex Wharf Footbridge, Lea Bridge, South Millfields, Friends Bridge / Middlesex Filter Beds Nature Reserve, Cow Bridge, Hackney Marsh Changing Rooms, Hackney Marsh Footbridge, Marshgate Bridge, Gainsborough Road Bridge, Hackney Wick Station Footbridge (proposed), Carpenter's Road Bridge, Hertford Union Canal Footbridge (proposed) and Old Ford Locks					
	1 2 3 4 5 6 8 10 11 12 13 14 15	There are no bridge names on any of the bridges crossing the River Lee Navigation along this stretch. A scheme to put name plaques on both sides of every bridge would be very beneficial to boaters as well as the towpath users in terms of orientation. In addition, the name of the road or path crossing the bridge could also be incorporated The bridges along this stretch are Springfield Marina Footbridge, Horse Shoe Bridge, Walthamstow Marshes Viaduct, Middlesex Wharf Footbridge, Lea Bridge, Lee Stopgates Footbridge, Cow Bridge, Hackney Marsh Footbridge, Marshgate Bridge, A102(M) Road Bridge, Gainsborough Road Bridge, Hackney Wick Railway Bridge Footbridge, Carpenter's Road Bridge and Hertford Union Canal Footbridge (proposed).					

Total cost of Signage

Map Ref No	Proposal		Project Deliverer	Potential Partners	Timescale/ Priority	Outline Cost	Comments
	TOWPATH IMPROVEMENTS						
	1 2	The towpath throughout this stretch of the River Lee Navigation is made up of a collection of different surfaces. Unfortunately a vast amount facilitates a poor quality pedestrian surface. A towpath improvements scheme is proposed as a priority for two stretches along this route, to create a user friendly environment meeting 'Access For All' standards. The two stretches are from South Millfields to Hackney Marsh Changing Rooms and Marshgate Bridge to Carpenter's Road Bridge. Comprehensive resurfacing is required, in conjunction with rationalisation of the towpath delineation and width in order to both facilitate access and retain a sustainable grass strip.					

Total cost of Towpath Improvements	

INTRODUCTION

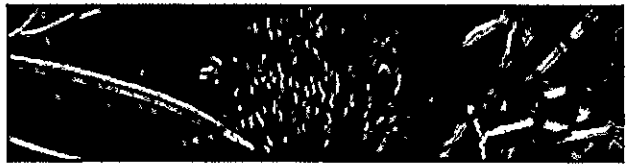
Groundwork Hackney and the Lower Lea Project have been involved in carrying out public consultation on behalf of British Waterways, to ensure that all people who use the River Lee Navigation corridor have had a chance to contribute to the development of this Action Plan. They carried out a wide range of public events, which included guided walks, cycle rides, community boat trips, work with schools and youth clubs, local residents, local businesses and waterway users.

The following feedback from the River Lee Navigation corridor users has been prepared by Groundwork Hackney and the Lower Lea Project, and forms a summary of their input into the Action Plan

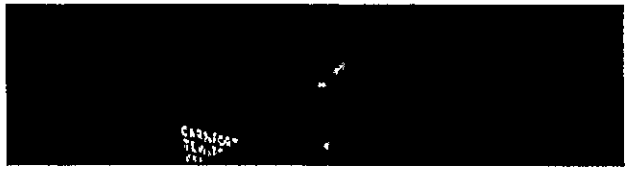
GENERAL VIEWPOINTS

USERS

WATERWAY ENVIRONMENT – LIKES AND DISLIKES



GETTING IN AND GETTING AROUND



MAKING IT BETTER

BUSINESS & DEVELOPMENT

SPECIFIC VIEWPOINTS

CYCLISTS

CHILDREN & YOUNG PEOPLE

ROWERS

BOAT RESIDENTS

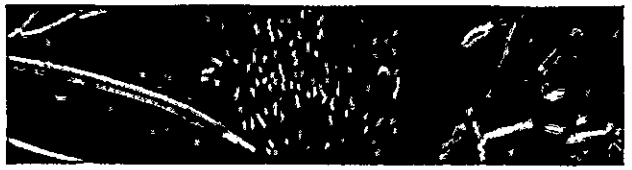
10
APPENDIX

USERS

Q What uses do you make of the Hackney Wick Waterway?

- Where is it?!
- Mainly walking for pleasure (with dogs) – various according to season.
- Walking from pub.
- Cycling : some to work; some to see friends; some for exercise.
- A few anglers and a few birdwatchers
- Most people were local to Hackney – mainly within 2 miles – none had actually travelled to the navigation other than by cycle.
- Very much a local resource.

WATERWAY ENVIRONMENT – LIKES AND DISLIKES



Q Do you think that the River Lee is:

General answers .

• Well looked after	N – rubbish
• Clean	N – rubbish
• Well used	N – sometimes
• Healthy for fish	Y – only the anglers
• Healthy for plants	N – over-run but nice

Q Do you think that the marshes are:

General answers

• Well looked after	N – rubbish – but seasonal
• Clean	N – rubbish
• Well used	Y – seasonal
• Healthy for wildlife	N – rubbish attracts vermin
• Healthy for plants	Y – lots of them

Q What aspects of the Hackney Wick Waterway do you like the most?

- Cycling on the towpath is a great way to travel – safer, quieter than roads
- The river, the wildlife.
- Quiet, green, wildlife.
- No cars. Green, fresh air, wildlife/wildness, isolation, space.
- Bird reserve/wildlife/trees. International camp site/kite flying. Great for cycling and relatively safe for kids. Walking.
- Great to see people using the marsh for football/river for boating. Pubs along the way.
- Open spaces – but going somewhere
- Quiet / solitude / tranquillity.
- Short cuts to work and to see friends.
- Wildlife.
- 'Fresh air'.

Q What aspects of the Hackney Wick Waterway do you like the least.

- Insecure spaces. Nowhere to get a cup of tea.
- Clogged up river in the summer – disgusting near Millfields Park. Area around Millfields Park looks sad – broken chairs, rubbish, weeds. Lesney Factory an eyesore – some others could make more effort. Hackney Refuse parking an eyesore.
- Traffic noise Dog muck.
- Muddy paths. Slippery surfaces.
- The rubbish generally. Business lack of thought on boundary fences.
- Fear of being mugged.
- Rubbish and litter and trolleys and more litter – doesn't look safe.
- Don't know where it's going to and from – where's the information.
- Smell – seasonal
- Too narrow.
- Barriers slow down cycles (conflict with pedestrians).
- Full of drunks / drug users.
- Difficult to plan journey – no links with public transport – no info

- Poor maintenance and feeling of neglect (although some like this).
- Conflict between walkers, rolling skaters, anglers and cyclists – big gripe.
- Feeling of insecurity and fear of crime, especially at twilight / early am / night.
- Poor lighting and access ways feel threatening.

People clearly appreciate the presence of the Marshes and the waterway – seeing them as peaceful havens from the bustle of inner city living, however much concern was expressed over personal safety, litter, footpath management and water quality.

A particular concern was the old power station / LBH waste transfer site at Millfields, which was viewed as a blight on the area, both because of its current use and its appearance.

GETTING IN AND GETTING AROUND

Q How do you get to the Hackney Wick Waterway?

- Nobody had actually travelled to the waterway – other than by cycle – most of these found it easy to get to the area, but knew it anyway
- Appeared to be very much a local resource – most people within 2 miles.
- Complaints about poor information on access and where it leads to.

Q How easy to get to do you think it is?

- Easy locally – just 'round the corner'.
- No-one could really imagine travelling to the waterway – not a London attraction!

Q Can you think of any changes which would make the area easier to access?

- Better cycle routes on roads in the area.
- Barriers, surfaces, car parks
- Link for cycle traffic from Victoria Park to Eastway.
- More buses. Hackney Tube.
- Quality of access – neglect makes it look dangerous, especially for kids.
- Better information – where's it from and to.
- Better interpretation, eg wildlife, history of canals, BUT some find this boring and vandalism makes thinks look worse.
- Can't get cycles through – absurd.
- Paths too narrow – sort out which bit for walkers and which bit for cyclists.
- Maintenance staff to patrol the area on a regular basis.

Q Do you feel safe using the Waterway footpaths?

- Not where you are forced to get off your bike and go through a gate sited at a 'dodgy' area.
- Not in the evening, due to lighting under bridges.
- Evenings, even when it is light, the canals are often a bit dodgy. Bridges are a problem as some cyclists go quite fast. Anglers take over whole paths often – antagonistic and hard to get through unless they move.
- M11 bridge is intimidating.

Q What do you think of the London network of waterway footpaths?

- General feeling that the waterway was not used as a network except by boaters and some cyclists – emphasis on localness and some wanted to keep it this way.
- Very poor signposting – sometimes confusing and vandalised – many did not even know it existed! Not really used as an educational resource and part of the national curriculum.

Whilst people were generally happy about getting to the Hackney Wick area, improved transport links, better cycle paths and better parking facilities were called for. Again, most people felt safe using the waterway footpaths, except in the evenings and in 'dodgy' areas. Some people felt that speeding cyclists were a risk and anglers were criticised for taking over the paths.

MAKING IT BETTER

Q Can you think of any changes to improve the waterway footpaths?

- Path along the south edge of the marsh, joining the old river path to the cut path.
- Some of the cycle gates are difficult to get through (I'm short!). They must present problems for others, particularly with prams, wheelchairs, unusual bikes, kids etc.
- Better lighting. More social atmosphere (cafés and pubs) would help calm the feeling that one is alone and open to be mugged or assaulted
- Maintenance. Improved surfacing.
- More bins.
- Less litter.
- Divide cyclist from pedestrians and anglers!
- Pot holes – general poor surface.
- Lack of co-ordination of signing etc makes things look uncared for.

Potential improvements centred on the removal of rubbish – both from the river and the paths, and the removal of footpath barriers, which were seen to obstruct many categories of user

Another common desire was for more cafés/pubs in the area and it was suggested on the grounds of safety as well as the promotion of the area's recreational potential.

Q Can you think of anything that would improve the quality of the river?

- More frequent cleaning – especially on the stretch south of Lea Bridge Road.
- Regular cleaning – especially in summer.
- Cleaning rubbish.
- Only getting people to care about it more and not chuck rubbish in.
- Better management.
- Areas of natural sloping banks instead of concrete walls, for wildlife access
- Clean rubbish regularly
- Get rid of weeds – duck weed?

Q Can you think of anything which would improve the quality of the marshes?

- Areas could be fenced off to improve/increase wildlife. Plant more (small) native trees
- Better management.
- The red cycle bridge to be open and go somewhere Cafés. Cycle access from the southwest.
- Evergreens to hide the new Spitalfields Market. Toilets which are maintained / open.
- Better facilities – toilets, lighting, access, better information and policing
- Better use / self-policing.

Thoughts on improving the quality of the river and marshes centred on rubbish management and the protection of wildlife, although facilities like toilets and cafés were also mentioned. Respondents had quite specific ideas of areas which needed to be 'greened' or cleared up As follows:

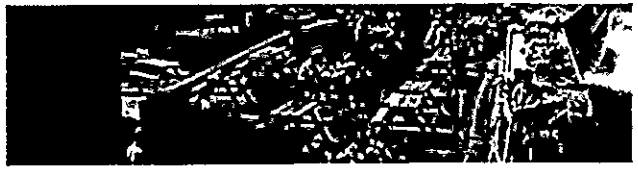
Q Are there any areas which need greening, through planting of trees, reeds etc?

- The old power station in south Millfields
- Anything which hides the electricity generating station on Millfields Park, the refuse parking lot and the new Spitalfields Market building
- Near Homerton High Street – very exposed.
- Better maintenance rather than new planting – some makes it dangerous.
- More trees – but not at low level so you can't see people coming towards you.
- Get rid of duck week - ?

Q Are there any areas which particularly need cleaning up?

- Wick Fields section – post traveller camp.
- Triangle between Homerton High Street and Eastway
- Princess of Wales Car Park / area south of it where rubbish gets dumped.
- Points where the rubbish collects in the waterway – corners
- Access points.

BUSINESS & DEVELOPMNT



Q What do you think of business activity in the area at the moment?

- Too many derelict warehouse backs. Lesney Factory dirty and noisy.
- I hardly know of any – not much is about making the area more attractive / user friendly / delivering services.
- Not too bad
- There needs to be an active campaign to bring businesses to the river.
- Don't know much about it. Some factories look untidy and smelly.
- Turns its back on the waterway – no interest except for the pubs.
- Dumping and pollution?

Q What sort of businesses would you like to see here?

- Conservation related.
- Restaurants / cafés, conservation, general, sports and leisure Resident participation
- Small scale, with low environmental impact.
- Businesses serving the needs of people / leisure services to engender a more pleasant social atmosphere, particularly at weekends
- Activities which generate employment without generating motor traffic.
- Boat hire, cycle hire, kite hire Cafés. Arts & Crafts – loads of Hackney artists.
- Anything that employs local people – cycle hire – boat hire.
- Use waterways for transport.
- People living on boats.
- Arts & Crafts
- Cafés.

Most respondents viewed current waterway businesses as dirty and unpleasant and plumped for more people friendly and environment friendly activity, based around leisure and recreation.

Again, a particular target was the old power station / waste transfer site, along with Lesneys and the new Spitalfields Market.

Q What new developments would you like to see here? (eg new businesses, housing, wildlife areas, leisure facilities etc).

- Demolish and greenspace the old power station. A cycle hire scheme.
- Leisure facilities Cow Bridge facilities improved including café. Make the area attractive to all kinds of people with different interests. At the moment local people don't even use it much.
- Activities that generate employment without generating motor traffic
- Maintain and promote the wildlife / nature reserve aspect, as it is quite unique to the area. Develop the triangle cut off by the railway. This bit seems really dodgy. Better paths through – red bridge to be open and a cycle path to Ruckholt Road.
- Wildlife areas. Keep all existing green space.
- Housing, leisure, conservation, nature.
- Wildlife areas.
- Sculptures; art trails.
- Enclaves but safe – tea spots = picnic areas.
- Seats and rest areas.
- Better cycling gates.
- Things for kids – events and use as an educational resource for national curriculum
- Play areas for young kids.
- Exercise trail.

In a similar vein to views already expressed, the focus for change was seen as improving the nature / wildlife and recreation / leisure potential of the area.

CYCLISTS

The area forms a popular cycle route, both for commuters and local leisure cyclists. Participants were, in general, happy with the nature and quality of the area, but felt particularly that the variety of footpath barriers in the area were a real problem – especially for disabled cyclists, or those with child seats or trailers.

Also seen as a problem was the quality of the paths after heavy rain, or during the winter months.

In common with other riverbank users, cyclists also wished recreational / leisure facilities

Q How many times in the last year have you used this area for:

a) Recreational Cycling 10 (average)

b) Commuting 100 (average)

Q Could you comment on the general quality of:

a) Path Surfaces

- Mostly OK. Some areas very muddy in wet weather Raised granite setts could be dangerous for thin tyred bikes
- Variable. I've got suspension – I avoid taking unsuspended bikes on them.
- Rough – 1 or 2 parts OK.
- OK most of the time.
- Muddy in wet weather – chiefly by arena fields and Wick Fields Don't like granite setts unless they are well levelled off – too slippery.

b) Signage

- More signs needed for people who don't know the area
- Should be a sign at southwest corner of Hackney Marsh telling cyclists to use the path rather than the towpath.
- Graffiti.
- Variable – I use a map in bits I don't know.
- Haven't noticed many signs.

Q Can you think of any new facilities which could improve the cycling experience in this area?

- Smoother paths.
- Refreshments.
- Café, toilets. Look at barriers.
- Get rid of some of those awkward cycle gates. Make clear where cyclists are supposed to go where there is a choice of routes. Café. Toilets.

Q Will the new Sustrans cycle route encourage you to use this area more?

- No!
- Possibly.
- Not sure.
- Probably.
- Yes.

Q What would be your main reason for <u>not</u> cycling in this area?

- Security.
- More barrier gates.
- Lack of safety measures – ie evening.
- Winter rain turning paths into a quagmire.

Q Do you think that provision for cyclists is an important features of regeneration?

- Of course.
- Yes yes yes yes!

Q Why?

- Along with more walkers / rovers I think an area becomes better to use, more friendly etc.
- 1) Sustainable transport. 2) Recreational / tourism.
- Environmentally friendly / keep fit.
- Encourage cycling – safe place for people to learn and enjoy it.
- Green transport has to be a strategy for the future.

Q If improvements were made to the area, would you use it more often for:

- Leisure Cycling Y – 100% N – 0%
- Commuting Y – 100% N – 0%

CHILDREN & YOUNG PEOPLE

Passing alongside several large estates and being home to a record breaking array of football pitches, the marshes and the waterway are an important space for children and young people. To collect these views, the Lower Lea Project took groups from the St Paul's (Homerton) Youth Project and the Hackney Marsh Adventure Playground on a trip along the river in the Pride of Lee.

Q What do you like most about the Hackney Wick Waterway?

- It is quiet.
- I can go fishing there.
- You've got lots of space to play games.
- Because people can see the fish.
- Bike ride.
- Boat ride.
- The boats and the flowers and the fish.
- I can go bike riding.

Q What do you like least about the Hackney Wick Waterway?

- The pollution.
- Rubbish, puddles, gates should be wider.
- Graffiti – especially racist graffiti.
- No-one cuts the grass and too much litter.
- The water is dirty

Q Would you like to see any of the following in the area?

Better cycle paths	6
A café	4
Better sports facilities	6
Better lighting	5
Special events/festivals	6
Better signposts/maps	5
Rowing/canoeing facilities	2
Anything else ...	
Bins	1
Athletics Stadium	1
Parks for children	1
Less rubbish	1

Q Can you think of any other ways to improve the area?

More bins

Someone could cut the grass so people can play sports.

More plants and more nature reserves

They should reduce the rubbish.

ROWERS

Largely based at the Springfield Marina, the navigation is a popular venue for rowers.

Q How many times over the last year have you been rowing on the Lee Navigation?

4 times per week (average).

Q Do you belong to a rowing club – is so, which one?

Lea Rowing Club.

Q What do you think are the best things about the Lee in Hackney for rowers?

It's local.

Relatively safe for water sports.

Non-tidal

It's calm water to row on

For central London there is a rural feel to it.

Attractive green space – Springfield Park / Hackney Marshes.

Not much through traffic.

Q Could you comment on the quality of the water in the navigation (depth, debris, wildlife etc).

The section between Tottenham Lock and the Curtains, just across from the Lea Bridge Road, the water is very dirty.

All kinds of unnameable debris floats in it.

There are frequently household items, Sainsburys' trolleys etc.

The quality of this very dirty water is off-putting It frequently smells, particularly at the aptly named 'Stink Bridge', downstream of the railway bridge.

It looks filthy.

Occasionally there are a few dead fish in it.

The river water goes bright green twice a year due to some chemical discharge upstream.

Downstream of Tottenham Lock the river is cleaner.

Water is very dirty – rubbish poses a safety problem and can cause boats to capsize.

Shallow in places where silt has built up.

Rubbish can pose difficulties for swimming in the water (ie capsizing).

Birds seem to be multiplying.

There is a problem with pennyworth which no-one seems to be addressing.

Q A proposal is currently being developed to look at the possibility of transporting waste by water, in specially built sealed barges. Have you heard of this proposal?

Yes (60%).

A bit (30%)

No (10%).

Q Do you have any views on the Waste by Water initiative?

- Good idea, but needs to happen when river is not busy, or being used by children.
- It's wonderful to use the river for transport and take it off the roads.
- Could be pollution from the barges.
- Needs to be regulated.
- Could be a danger to rowers.

Q Could you comment on the nature and maintenance of the navigation towpath in the area.

- It is not particularly good.
- Some of the towpath is reasonable, although large puddles develop.
- It can be very muddy.
- The towpaths are becoming increasingly popular.
- I do see grass being out and shrubs etc being pruned.
- The parts which go past the back of the factories look intimidating and rubbishy.

Q Could you comment on the nature of waterway businesses which border the navigation in this area.

- There are some illegal discharges into the river.
- No adverse comment.
- There appear to be relatively little in our stretch
- It would be nice to see businesses facing the river, instead of showing us their neglected back side.

Q Can you think of any improvements to the waterway, or to local facilities which would enhance the area for rowers?

- Some well maintained public toilets close to the riverside.
- Notices and education for those in charge of motorised boats – which side of the river to be on, speed reductions, consideration for children, rowers and canoeists who are vulnerable.
- Need to cut speed of motorised boats, cut wash and sound or shout warnings.
- Water users need to be responsible and aware of safety issues
- Ban mooring of boats on bends.
- Keep river clear of rubbish – fine those caught dumping
- Danger from other waterway users.

BOAT RESIDENTS

The navigation is home to a large population of boat residents, both stationary and continuous cruisers. Questionnaires were distributed by staff at the Lee Valley Marina to boat owners who stopped to use their services.

Q Is your boat your main resident?

- Yes 30%.
- No 70%.

Q How many times in the past year have you taken your boat down the Lee to Hackney Wick?

- Frequently.
- 2 or 3 times per month.
- 2 times.
- Once per month.

Q What do you think of the condition or maintenance of the locks on this stretch of waterway?

- Fair to good.
- OK.
- No problem.

Q What do you think of the quality of the water on the navigation (depth, debris, wildlife etc)?

- Occasionally poor, but positive improvements in last 2 years
- Depths need improving/monitoring
- Too shallow in parts
- Pennyworth needs managing.
- Large items of rubbish (sofas) can be a real problem
- Too much unchecked pollution (sunken narrowboats and other craft on the corner of Hertford Union spilt a major slick).
- Birds seem on the increase.
- Too much rubbish in the river.

Q What do you think of the services and facilities for boat users along the navigation? Can you think of any improvements or new services which you would like to see?

- Fenced off secure new overnight moorings in the vicinity of Hackney Marsh.
- Move the tap at Old Ford so that you can use it without clogging up the lock.

Q A proposal is currently being developed to look at the possibility of transporting waste by water in specially built sealed barges. Have you heard of this proposal?

- Yes – 100%.

Q Do you have any views on the Waste by Water initiative?

- Excellent idea.
- Depths will improve – encourage commerce on the water.
- Very encouraging development.

Q Could you comment on the nature and upkeep of the navigation towpath in this area.

- Fairly good.
- We 'continuous cruise' the whole system and London can be justifiably proud of improvements in recent years
- It is becoming a more pleasurable place to visit by water.
- It's a lovely green space for so close to inner London.
- Litter can be a problem and looks unsightly.
- The traveller site near the motorway bridge is an eyesore

Q Could you comment on the nature of waterway businesses which border the navigation in this area.

- Dramatic improvement to the Lee Valley Marina.
- Need to keep watch on junk yards for overspill into the navigation.
- Not much business in this area (probably a good thing too).
- Factories look unpleasant and dirty.

Q Can you think of anything else which can be done to improve the navigation for boat users?

- Mark, number of name bridges.
- Encourage more boats to use the area.
- Waterside pubs/cafés.

British Waterways

Waterway Environment Services

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